

EPA Registration Number 87290-63

PROCESSING REQUEST

Reg # 87290-63 (AG) Decision # 514296

Description: Conditional Registration of
new product.

Electronic Label & Letter
(see PPLS):

OR

Non Electronic
Label & Letter
(Scanning required):

☒ Dated: 5/24/16 ☐ Dated:

Only one label type should be selected

Other Materials Sent (see jacket):

☒ New CSF(s) Dated: 2/23/16

☐ Other:

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Kinga Kasprzyk

Division: RD / FB

Phone: 703-347-8429

Date: 5/25/16



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

87290-63

Date of Issuance:

5/24/16

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Willowood Pyrac 2SC

Name and Address of Registrant (include ZIP Code):

Michael Kellogg
Agent for Willowood, LLC.
c/o Pyxis Regulatory Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Tony Kish, Product Manager 22
Fungicide Branch, Registration Division (7505P)

Date:

5/24/16

2. You are required to comply with the data requirements described in the DCI Order identified below:

- a. Pyraclostrobin GDCI-099100-1467 found at:
<https://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2014-0051-0019>

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: <http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>

3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 87290-63."
4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 02/23/2016

If you have any questions, please contact Kiryssa Kasprzyk by phone at (703) 347-8429, or via email at kasprzyk.kiryssa@epa.gov.

Enclosure

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

{BOOKLET FRONT PANEL LANGUAGE}

GROUP 11 FUNGICIDE

WILLOWOOD PYRAC 2SC FUNGICIDE

For use in disease control and plant health in the following crops: alfalfa, barley, citrus fruits, corn (all types), cotton, dried shelled peas and beans, edible-podded legume vegetables, grass grown for seed, mint, oats, oilseed crops, peanut, pecan, rye, sorghum, soybean, succulent shelled peas and beans, sugar beet, sugarcane*, tuberous and corm vegetables (includes potato), and wheat and triticale.

*Not approved for this use in California.

ACTIVE INGREDIENT**:

Pyraclostrobin: (carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl] methoxy-, methyl ester).....23.3%

OTHER INGREDIENTS:.....76.7%

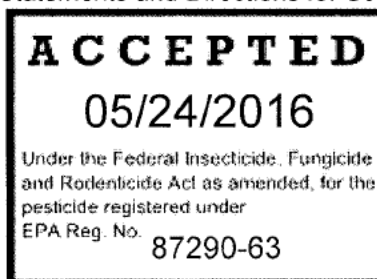
TOTAL:.....100.0%

**Equivalent to 2.08 pounds of pyraclostrobin per gallon.

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail).

See label booklet for First Aid, Precautionary Statements and Directions for Use.



EPA Reg. No. 87290-xx

EPA Est. No.

Manufactured for:
Willowood, LLC
1600 NW Garden Valley Blvd. #120
Roseburg, OR 97471

Net Contents:

{LANGUAGE INSIDE BOOKLET}

| FIRST AID | |
|---|--|
| If swallowed | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| If on skin or clothing | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. |
| If in eyes | <ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. • Call a poison control center or doctor for treatment advice. |
| If inhaled | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice. |
| HOT LINE NUMBER | |
| Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Mon. - Fri. 8:00 am to 12:00 pm Pacific Time. For emergencies, call the poison control center at 1-800-222-1222. | |

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: May be fatal if swallowed. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, waterproof gloves, and protective eyewear.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Protective eyewear
- Shoes plus socks
- Waterproof gloves

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow to come into contact with oxidizing agents. A hazardous chemical reaction may occur.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

| User Safety Recommendations |
|--|
| <p>Users should:</p> <ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. |

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product may contaminate water through drift of spray in wind. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or tribe, consult the Agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Product Information

Willowood Pyrac 2SC, a suspension concentrate (SC), contains the active ingredient pyraclostrobin, a member of the strobilurin class of chemistry derived from a natural antifungal substance. Preventive applications optimize disease control, resulting in improved plant health. The increase in plant health comes from the combined effect of disease control (including fungal diseases listed in Crop-specific

directions), improved growth efficiency and improved stress tolerance. Overall increased plant health may result in an improvement in crop growth and crop quality as well as increased crop yields.

To maximize disease control, apply Willowood Pyrac 2SC in a regularly scheduled protective spray program and use in a rotation program with other fungicides.

Because of its high specific activity, Willowood Pyrac 2SC has good residual activity against target fungi.

Willowood Pyrac 2SC is not for use in greenhouse or transplant production.

Mode of Action

Pyraclostrobin, the active ingredient of Willowood Pyrac 2SC, belongs to the group of respiration inhibitors classified by the U.S. EPA as quinone outside inhibitors (QoI) or target site of action Group 11 fungicides.

Resistance Management

Willowood Pyrac 2SC is effective against pathogens resistant to fungicides with modes of action different from those of QoI fungicides (target site Group 11), such as dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides.

Fungal isolates resistant to Group 11 fungicides, such as pyraclostrobin, azoxystrobin, fluoxastrobin, trifloxystrobin, and kresoxim-methyl, can eventually dominate the fungal population if Group 11 fungicides are used predominantly and repeatedly in the same field as successive years as the primary method of control for the targeted pathogen species. This can result in reduction of disease control by Willowood Pyrac 2SC or other Group 11 fungicides.

DO NOT exceed the maximum annual use rate or the total number of Willowood Pyrac 2SC applications per year and the maximum number of Willowood Pyrac 2SC applications stated in **Restrictions and Limitations – All Crops** and **Table 2. Willowood Pyrac 2SC Crop-Specific Requirements**. Follow the label instructions for use of Willowood Pyrac 2SC or other target site of action Group 11 fungicides that have a similar site of action on the same pathogens.

When using a Group 11 fungicide as a solo product, the number of applications should be no more than $\frac{1}{3}$ of the total number of fungicide applications per year.

In programs applying or using tank mixes or pre-mixes of a Group 11 fungicide with a fungicide of another group, the number of Group 11 fungicide (QoI)-containing applications must not be more than $\frac{1}{2}$ of the total number of fungicide applications per year. In programs applying or using Group 11 fungicides with both solo products and mixtures, the number of Group 11 fungicide (QoI)-containing applications must not be more than $\frac{1}{2}$ of the total number of fungicide applications per year.

In fungicide alternation programs of Group 11 (QoI)-containing fungicides with non-Group 11 fungicides of different modes of action, the maximum number of sequential applications stated in **Restrictions and Limitations – All Crops** and **Table 2. Willowood Pyrac 2SC Crop-Specific Requirements** must be alternated with at least an equal number of applications of a non-Group 11-containing fungicide prior to using the Group 11 (QoI)-containing fungicide again. If two sequential applications of a Group 11 (QoI)-containing fungicide are made, follow this block of applications with 2 or more applications of a non-Group 11-containing fungicide prior to using the Group 11 (QoI)-containing fungicide again.

Resistance Management Advisory

The following instructions may delay the development of fungicide resistance:

1. **Tank mixtures:** Use tank mixtures with effective fungicides from different target site of action groups that are registered/permitted for the same use and that are effective against the pathogens of concern.
Use at least the minimum labeled rates of each fungicide in the tank mix.
2. **IPM** – Integrate Willowood Pyrac 2SC into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor and/or Willowood, LLC representative for additional IPM strategies established for your area. Willowood Pyrac 2SC can be used in agricultural extension

advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.

3. **Monitoring** – Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development. If a Group 11 target site fungicide, such as Willowood Pyrac 2SC, appears to be less effective against a pathogen that is previously controlled or suppressed, contact a Willowood, LLC representative, local extension specialist, or certified crop advisor for further investigation.

Application Instructions

Apply Willowood Pyrac 2SC rates as instructed in **Table 2. Crop-specific Requirements**. Apply Willowood Pyrac 2SC with ground sprayer, aerial equipment, or through sprinkler irrigation equipment. Check equipment frequently for calibration.

For containers 5 gallons or less, shake well prior to use. For containers greater than 5 gallons, recirculate prior to use. Consult your Willowood, LLC representative for additional information regarding agitation and recirculation.

Under low-level disease conditions, use minimum application rates. For severe or threatening disease conditions, use maximum application rates and shortened spray intervals.

Cleaning Spray Equipment

Spray equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used prior to Willowood Pyrac 2SC.

Ground Application

Apply Willowood Pyrac 2SC in sufficient water to ensure thorough coverage of foliage, blooms, and fruit for optimum disease control. Refer to **Additives and Tank Mixing Information** section for adjuvant or crop oil restrictions for ground applications in corn. See **Table 2. Willowood Pyrac 2SC Crop-specific Requirements** for in-furrow instructions.

Aerial Application

For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Unless otherwise specified in this label or in supplemental labeling, use no less than 5 gallons of spray solution per acre. For aerial application to citrus orchards, use no less than 10 gallons of spray solution per acre. Do not apply when conditions favor drift from target area.

Aerial Application to Alfalfa, Barley, Corn, Oats, Rye, Soybean, Wheat and Triticale

Aerial applications of Willowood Pyrac 2SC can be made to corn, soybean, wheat and triticale in water volumes of 1 or more gallons of spray solution per acre (gpa). Aerial applications of Willowood Pyrac 2SC can be made to alfalfa, barley, oats and rye in water volumes of 2 or more gallons of spray solution per acre (gpa). The use of a crop oil or adjuvant can be used to improve spray coverage (see **Additives and Tank Mixing Information** section). Refer to the adjuvant product label for specific use directions and restrictions.

For optimum results in high disease pressure, use a minimum spray volume of 4 gpa. Select spray nozzles, pumping pressure, and sprayer height to provide medium-to-fine spray droplets that penetrate throughout the crop canopy. Spray calibration must be conducted to confirm spray droplet sizes. Continue to monitor spray application (including weather conditions) to ensure proper droplet size and canopy penetration.

Spray volumes of 5 gallons or more per acre. For applications with spray volumes of 5 gallons or more per acre, an adjuvant can be used to improve spray coverage (see **Additives and Tank Mixing Information**). Refer to the adjuvant product label for specific use directions and restrictions.

Select spray nozzles, pumping pressure, and sprayer height to provide medium-to-fine spray droplets that penetrate throughout the crop canopy. Calibrate spray to confirm spray droplet sizes. Monitor spray application including weather conditions to ensure proper droplet size and canopy penetration.

Spray Drift Management

Do not spray when conditions favor drift beyond area intended for application. Conditions that may contribute to drift include thermal inversion, wind speed and direction, spray nozzle/pressure combinations, spray droplet size, temperature/humidity, etc. Contact your state extension agent for spray drift prevention guidelines in your area. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers. Avoiding spray drift at the application site is the responsibility of the applicator.

Aerial Application Methods and Equipment

The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply under circumstances where possible drift to unprotected persons, to food, forage, or other plantings that might be damaged, or crops thereof rendered unfit for sale, use or consumption can occur.

Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the fixed wingspan or 90% of the rotor blade diameter.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the aerial drift reduction advisory information.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. Use the largest droplet size consistent with acceptable efficacy. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind**; **Temperature and Humidity**; and **Temperature Inversions**).

Controlling Droplet Size:

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Wind

Do not apply at wind speeds greater than 15 mph. Drift potential is lowest when wind speed does not exceed 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Avoid applications below 2 mph due to variable wind direction and high inversion potential. Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

Low humidity and high temperatures increase the evaporation of spray droplets and, therefore, the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions.

Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., bodies of water or non-target crops) is minimal and when wind is blowing away from the sensitive areas.

Directions For Use Through Sprinkler Irrigation Systems

Sprayer Preparation

Chemical tank and injector system must be thoroughly cleaned. Flush system with clean water.

Application Instructions

Apply Willowood Pyrac 2SC at rates and timings specified in this label.

Sprinkler Irrigation Applications Use Precautions

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- Add this product to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. In continuous moving systems, inject this product/water mixture continuously, applying the labeled rate per acre for that crop. Do not exceed ½ inch (13, 577 gallons) per acre. In stationary or non-continuous moving systems, inject the product/water mixture in the last 15 to 30 minutes of each set allowing sufficient time for all of the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control. Maintain agitation during the entire application period.
- Contact state extension service specialists, equipment manufacturers, or other experts for calibration questions.

- The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide-injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Specific Instructions for Public Water

1. Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Additives and Tank Mixing Information

Willowood Pyrac 2SC fungicide can be tank mixed with most recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives as specified in **Table 2. Willowood Pyrac 2SC Crop-specific Requirements**.

Under some conditions, the use of additives or adjuvants may improve the performance of Willowood Pyrac 2SC. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance. Physical incompatibility, reduced disease control, or crop injury can result from mixing Willowood Pyrac 2SC with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants and additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application. Follow the most restrictive label.

Adjuvant or Crop Oil Use Limitations on Corn (ground and aerial applications)

Adjuvant crop damage can occur when an adjuvant or crop oil is used after the V8 stage and before the VT stage (the VT stage is defined as when the tassel's last branch is completely visible outside the whorl). If an adjuvant or crop oil is used after the V8 stage and before the VT stage, the grower and user are responsible for contacting the adjuvant source (adjuvant distributor, retailer, or manufacturer) for advice and confirmation that the adjuvant has been tested and proven to be safe for application from V8 to VT corn stage. Refer to adjuvant and/or crop oil labels for specific use directions and restrictions. Always follow the most restrictive label.

Another fungicide or an insecticide may be included in the tank mix if needed and labeled for use on corn. Refer to the tank mix pesticide product labels for specific use directions and restrictions. Always follow the most restrictive label.

Mixing Order

1. **Water** – Agitate a thoroughly clean sprayer tank $\frac{3}{4}$ full of clean water.
2. **Agitation** – Maintain constant agitation throughout mixing and application.
3. **Inductor** – If an inductor is used, rinse it thoroughly after each component has been added.
4. **Products in PVA bags** – Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5. **Water-dispersible products** (such as Willowood Pyrac 2SC, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) – **For containers 5 gallons or less, shake well prior to use. For containers greater than 5 gallons, recirculate prior to use.** Consult your Willowood, LLC representative for additional information regarding agitation and recirculation.
6. **Water-soluble products**
7. **Emulsifiable concentrates** (such as oil concentrates when applicable)
8. **Water-soluble additives** (such as ammonium sulfate [AMS] or urea ammonium nitrate [UAN] when applicable)
9. **Remaining quantity of water**

Make sure each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during application. See **Table 2. Willowood Pyrac 2SC Crop-specific Requirements** for more details.

Restrictions and Limitations – All Crops

- Do not exceed the maximum product rate (fl ozs/A) per year, the maximum rate per application, or the total number of applications of Willowood Pyrac 2SC per year as stated in **Table 1. Willowood Pyrac 2SC Restrictions and Limitations Overview** and **Table 2. Willowood Pyrac**

2SC Crop-specific Requirements. Preharvest interval (PHI) restrictions are also included in these tables.

- Do not use Willowood Pyrac 2SC in greenhouse or transplant production.
- For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Crop Rotation Restriction

Crops listed on the Willowood Pyrac 2SC, Cabrio® EG fungicide and Pristine® fungicide labels may be planted immediately following the last application. For all other crops, do not plant sooner than 14 days after the last application.

Ground Application Directed or Banded Sprays

The application rates shown in the following tables pertain to both aerial and ground (broadcast) methods of application. Willowood Pyrac 2SC may also be applied as a directed or banded spray over the rows or plant beds with alleys or row middles left unsprayed. For such uses, reduce the Willowood Pyrac 2SC rate in proportion to the area actually sprayed. This adjustment is necessary to prevent applying the product at use rates higher than permitted on this label.

Use the following formula to determine the broadcast equivalent rate for directed or banded sprays:

Sprayed bed width + unsprayed row middles = total row width

$$\frac{\text{Sprayed bed width in inches}}{\text{Total row width in inches}} \times \frac{\text{broadcast rate}}{\text{treated acre}} = \frac{\text{band rate}}{\text{field acre}}$$

EXAMPLE: Directed spray application to 45-inch plant beds separated by 15-inch unsprayed row-middles at a 12 fl ozs/A broadcast rate:

45 inches sprayed bed width + 15 inches unsprayed row middles = 60 inches total row width

$$\frac{45 \text{ inches sprayed bed width}}{60 \text{ inches total row width}} \times \frac{12 \text{ fl ozs Willowood Pyrac 2SC}}{\text{treated acre}} = \frac{9 \text{ fl ozs Willowood Pyrac 2SC}}{\text{field acre}}$$

Table 1. Willowood Pyrac 2SC Restrictions and Limitations Overview¹

| Crop/Crop Group ² | Minimum Time from Application to Harvest (PHI)(days) | Maximum Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) (lbs ai pyraclostrobin) |
|--|--|---|--|--|
| Alfalfa | 14 | 9 | 3 | 27 ³ (0.45) |
| Barley | See Table 2. Willowood Pyrac 2SC Crop-specific Requirements | 9 | 2 | 18 (0.29) |
| Citrus Fruits Group ⁴ | 0 | 15 | 2 | 54 (0.88) |
| Corn ⁵ (all types) | 7 | 12 | 2 | 72 (1.18) |
| Cotton ⁵ | 30 | 12 | 2 | 36 (0.58) |
| Dried Shelled Peas and Beans ⁵ (except soybeans) | 21 | 9 | 2 | 18 (0.29) |
| Edible-podded | 7 | 9 | 2 | 18 |

| Crop/Crop Group ² | Minimum Time from Application to Harvest (PHI)(days) | Maximum Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) (lbs ai pyraclostrobin) |
|--|--|---|--|---|
| Legume Vegetables | | | | (0.29) |
| Grass Grown for Seed | 14 | 12 | 2 | 24 (0.39) |
| Mint | 14 | 12 | 2 | 48 (0.78) |
| Oats | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) | 9 | 2 | 18 (0.29) |
| Oilseed Crops ⁵ | 21 | 12 | 2 | 24 (0.39) |
| Peanut ⁵ | 14 | 15 | 2 | 45 (0.73) |
| Pecan | 14 | 7 | 2 | 28 (0.46) |
| Rye | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55) | 9 | 2 | 18 (0.29) |
| Sorghum | Apply no later than 25% flowering | 12 | 1 | 12 (0.20) |
| Soybean ⁵ | 21 | 12 | 2 | 24 (0.39) |
| Succulent Shelled Peas and Beans | 7 | 9 | 2 | 18 (0.29) |
| Sugar Beet ⁵ (roots and tops) | 7 | 12 | 2 | 48 (0.78) |
| Sugarcane ⁵ | 14 | 12 | 2 | 48 (0.78) |
| Tuberous Corm Vegetables Subgroup ⁵ (includes potato) | 3 | 12 | 1 | 72 (1.18) |
| Wheat and Triticale | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) | 9 | 2 | 18 (0.29) |

¹ See Table 2. Willowood Pyrac 2SC Crop-specific Requirements for complete directions and exceptions.

² For a complete list of crops within a crop group, see Table 2. Willowood Pyrac 2SC Crop-specific Requirements.

³ Do not apply more than 27 fl ozs/A (0.45 lb ai/acre) of Willowood Pyrac 2SC in alfalfa per year.

⁴ Maximum product rate per acre per application may vary for citrus fruits depending on target disease. Refer to Table 2. Willowood Pyrac 2SC Crop-specific Requirements, Citrus Fruits for maximum rates per application by target disease.

⁵ The maximum product rate per year includes the combination in-furrow and foliar uses.

⁶ Not for use on sugarcane in California.

Aerial application is permitted for all labeled crops. For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Table 2. Willowood Pyrac 2SC Crop-specific Requirements

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------|--|---|--|--|---|
| Alfalfa | Anthracnose <i>Colletotrichum trifolii</i> | 6 to 9 | 3 | 27 (0.45 lb ai/acre) | 14 |
| | Common leaf spot <i>Pseudopeziza medicaginis</i> | | | | |
| | Downy mildew <i>Peronospora trifoliorum</i> | | | | |
| | Leaf spot <i>Leptosphaerulina briosiani</i> | | | | |
| | Powdery mildew <i>Erysiphe pisi</i> | | | | |
| | Rhizoctonia blight/black patch <i>Rhizoctonia</i> spp. | | | | |
| | Rust <i>Uromyces</i> spp. | | | | |
| | Spring black stem and leaf spot <i>Phoma medicaginis</i> | | | | |
| | Stagnospora leaf spot <i>Stagnospora mellilot</i> | | | | |
| | Stemphyllium leaf spot <i>Stemphyllium</i> spp. | | | | |
| | Summer black stem and leaf spot <i>Cercospora medicaginis</i> | | | | |
| | Yellow leaf blotch <i>Leptotrichila medicaginis</i> | | | | |

Application Directions: For optimal disease control, begin Willowood Pyrac 2SC applications prior to disease development.

Resistance Management. Do not make more than three (3) Willowood Pyrac 2SC applications per year.

Repeat applications on a 14 to 21 day interval if conditions are conducive for disease development. Do not make more than two (2) Willowood Pyrac 2SC applications per cutting or three (3) Willowood Pyrac 2SC applications per year. Use the higher rate and shorter interval when disease pressure is high.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|---|--|--|---|
| Barley | Black point Kernal blight or Head mold <i>Cochliobolus sativus</i> , <i>Alternaria</i> spp. | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55); 14 days in selected states (see map). |
| | Leaf rust <i>Puccinia hordei</i> , <i>P. recondite</i> | | | | |
| | Net blotch <i>Pyrenophora teres</i> | | | | |
| | Powdery mildew <i>Erysiphe graminis</i> f. sp., <i>hordei</i> | | | | |
| | Scald <i>Rhynchosporium secalis</i> | | | | |
| | Septoria leaf and glume blotch <i>Septoria</i> spp., <i>Stagonospora</i> spp. | | | | |
| | Spot Blotch <i>Cochliobolus sativus</i> | | | | |
| | Stem Rust <i>Puccinia graminis</i> f. sp., <i>tritici</i> | | | | |
| | Stripe rust <i>Puccinia striiformis</i> | | | | |
| | Tan Spot Yellow leaf spot <i>Pyrenophora trichostoma</i> | | | | |

Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a

labeled non-Group 11 fungicide with a different mode of action.

Do not harvest barley hay or feed green-chopped barley within 14 days of last application.

*For early season control of net blotch, Septoria leaf and glume blotch, spot blotch, and tan spot when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

Barley can be harvested 14 days after the last application in the following states: AZ (north of I-10), CO, ID, MT (west of Rt 87/I-15), NV, NM, OR, TX (west of Rt 283/377), UT, WA, and WY (west of I-25/I-90), as shown in the 14-Day PHI Use Area for Barley map.

14-Day PHI Use Area for Barley



Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|----------------------------|--|---|--|--|---|
| Citrus Fruits Group | Greasy spot <i>Mycosphaerella citri</i> | 9 to 12 | 2 | 54 (0.88 lb ai/acre) | 0 |
| Australian | Scab <i>Elsinoe</i> spp. | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|----------------------------|--|--|--|---|---|
| desert lime | Alternaria brown spot <i>Alternaria citria</i> | 12 to 15 | | | |
| Australian finger lime | Anthracnose | | | | |
| Australian round lime | <i>Colletotrichum acutatum</i> , <i>C. gloeosporioides</i> | | | | |
| Brown River finger lime | Black spot | | | | |
| Calamondin | <i>Guignardia citricarpa</i> | | | | |
| Citron | Melanose | | | | |
| Citrus hybrids | <i>Diaporthe citri</i> | | | | |
| Chironja | Post bloom fruit drop | | | | |
| Grapefruit | <i>Colletotrichum acutatum</i> | | | | |
| Japanese summer grapefruit | | | | | |
| Kumquat | | | | | |
| Lemon | | | | | |
| Lime | | | | | |
| Mediterranean mandarin | | | | | |
| Mount white lime | | | | | |
| New guinea wild lime | | | | | |
| Orange, sour | | | | | |
| Orange, sweet | | | | | |
| Pummelo | | | | | |
| Russell River lime | | | | | |
| Satsuma mandarin | | | | | |
| Sweet lime | | | | | |
| Tachibana orange | | | | | |
| Tahiti lime | | | | | |
| Tangelo | | | | | |
| Tangerine (mandarin) | | | | | |
| Tangor | | | | | |
| Trifoliate | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|----------------|---|--|--|---|
| orange Uniq fruit Cultivars, varieties and/or hybrids of these | | | | | |

Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 10- to 21-day interval.

Use the higher rate when disease pressure is high.

For control of disease other than greasy spot, integrate 1 to 2 Willowood Pyrac 2SC applications early in the spray program. **For greasy spot control,** integrate 1 to 2 Willowood Pyrac 2SC applications into the fungicide program during the mid- to late-season.

For aerial application to citrus orchards, use no less than 10 gallons of spray solution per acre.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.88 lb ai pyraclostrobin (54 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|---|---|--|---|---|
| Corn Field corn Popcorn Sweet corn Seed production corn | Anthracnose** <i>Colletotrichum graminicola</i> Eyespot <i>Kabatiella zeae</i> Gray leaf spot <i>Cercospora zeamaydis</i> Northern corn leaf blight** <i>Exserohilum turcicum</i> Northern corn leaf spot** <i>Cochliobolus carbonum</i> | 6 to 12 | 2 | 72 (1.18 lbs ai/acre) | 7 |

| | | | | | |
|--|--|--|--|--|--|
| | Physoderma brown spot** <i>Physoderma maydis</i> Rust, common <i>Puccinia sorghi</i> Rust, Southern <i>Puccinia polyspora</i> Southern corn leaf blight** <i>Bipolaris maydis</i> Yellow leaf blight** <i>Phyllosticta maydis</i> | | | | |
|--|--|--|--|--|--|

Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high. Under high disease pressure for Northern corn leaf blight and Southern corn leaf blight, apply 9 to 12 fl ozs per acre.

Willowood Pyrac 2SC can be used with adjuvants in corn. See **Additives and Tank Mixing Information** and **Mixing Order** section for more details.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per year.

In field corn, do not make more than two (2) Willowood Pyrac 2SC applications per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. If more than two (2) Willowood Pyrac 2SC applications are made in a multiple spray program, alternate each subsequent Willowood Pyrac 2SC application with at least one (1) application of a non-Group 11 fungicide.

*The maximum product rate per year includes the combination of in-furrow and foliar uses.

**The use rate in California is 9 to 12 fl ozs per acre.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Corn | | | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|---|---|--|---|---|
| Cotton | Alternaria leaf spot, boll rot <i>Alternaria</i> spp. | 6 to 12 | 2 | 36 (0.58 lb ai/acre) | 30 |
| | Anthracoise, boll rot <i>Glomerella</i> spp. | | | | |
| | Ascochyta blight, boll rot <i>Ascochyta</i> spp. | | | | |
| | Cercospora blight and leaf spot <i>Cercospora</i> spp. | | | | |
| | Diplodia boll rot <i>Diplodia</i> spp. | | | | |
| | Hard lock, boll rot <i>Fusarium</i> spp. | | | | |
| | Phoma blight, boll rot <i>Phoma</i> spp. | | | | |
| | Rust <i>Puccinia</i> spp., <i>Phykopsora</i> spp. | | | | |
| | Stemphyllium leaf spot <i>Stemphyllium</i> spp. | | | | |

Applications Directions. For foliar and boll rot disease control, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are

favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high. **For seedling disease control**, see in-furrow application instructions following.

Willowood Pyrac 2SC can be used with adjuvants in cotton. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

No livestock grazing or feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.58 lb ai pyraclostrobin (36 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per year includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Cotton | | | | | | | | | |
|--|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre. When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action. Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC. | | | | | | | | | |
| ¹ For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet. For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet. For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet. For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet. For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet. | | | | | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|--|---|--|--|
| Dried Shelled Peas and Beans (except soybeans) Broad bean Chickpea Guar Lablab bean Lentil Pigeon pea Lupinus spp. Grain lupin Sweet lupin White lupin Phaseolus spp. Field bean Kidney bean Lima bean Navy bean Pink bean Pinto bean Tepary bean Vigna spp. Adzuki bean Black-eyed pea Catjang Cowpea Crowder pea Moth bean Mung bean Rice bean Southern pea Urd bean Pisum spp. Field pea | Anthracnose <i>Colletotrichum</i> spp. Alternaria leaf and pod spot <i>Alternaria</i> spp. Ascochyta blight <i>Phoma exigua</i> , <i>Ascochyta</i> spp. Asian soybean rust <i>Phakopsora pachyrhizi</i> Cercospora leaf spot <i>Cercospora</i> spp. Downy mildew <i>Phytophthora nicotianae</i> Mycosphaerella blight <i>Mycosphaerella</i> spp. Powdery mildew <i>Erysiphe polygoni</i> Rust <i>Uromyces appendiculatus</i> | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 21 |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in dried shelled peas and beans (except soybean). See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a</p> | | | | | |

labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per year includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Dried Shelled Beans* (except soybeans) | | | | | | | | | |
|---|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | see footnote ¹ | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 9.0 | 8.5 | 8.1 |
| <p>Applications Directions. Use 0.1 to 0.6 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.</p> <p>When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 fl ozs and/or tank mix with a fungicide having a different mode of action.</p> <p>Do not apply more than 9 fl ozs per acre of Willowood Pyrac 2SC.</p> <p>*Adzuki bean, black-eyed pea, broad bean, catjang, chickpea, crowder pea, field bean, grain lupin, guar, kidney bean, lablab bean, lima bean, moth bean, mung bean, navy bean, pink bean, pinto bean, rice bean, Southern pea, sweet lupin, tepary bean, urd bean, and white lupin</p> <p>¹For 30- to 34-inch rows, use a maximum of 0.5 fl oz per 1000 row feet. For 20- to 22-inch rows, use a maximum of 0.3 fl oz per 1000 row feet. For 15-inch rows, use a maximum of 0.2 fl oz per 1000 row feet.</p> | | | | | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|--|---|
| Edible-podded Legume Vegetables | Alternaria leaf and pod spot <i>Alternaria</i> spp. | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 7 |
| Jack bean | Anthracnose | | | | |
| Pigeon pea | <i>Colletotrichum</i> spp. | | | | |
| Soybean (immature seed) | Ascochyta blight | | | | |
| Sword bean | <i>Phoma exigua</i> , <i>Ascochyta</i> spp. | | | | |
| Phaseolus spp. | Asian soybean rust <i>Phakopsora</i> | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|--|---|--|--|---|
| Runner bean Snap bean Wax bean Vigna spp. Asparagus bean Chinese longbean Moth bean Yardlong bean Pisum spp. Dwarf pea Edible-podded pea Snowpea Sugar snap pea | <i>pachyrhizi</i> Cercospora leaf spot <i>Cercospora</i> spp. Downy mildew <i>Phytophthora nicotianae</i> Mycosphaerella blight <i>Mycosphaerella</i> spp. Powdery mildew <i>Erysiphe polygoni</i> Rust <i>Uromyces appendiculatus</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.

Willowood Pyrac 2SC can be used with adjuvants in edible-podded legume vegetables. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|-----------------------------|--|---|--|--|---|
| Grass Grown for Seed | Rust <i>Puccinia recondita</i> , <i>P. graminis</i> <u>Suppression Only:</u> Powdery mildew <i>Erysiphe graminis</i> | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 14 |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. Apply again 14 to 21 days later.

Use the higher rate and shorter interval when disease pressure is high.

Do not graze or feed forage or hay to livestock within 27 days of last application.

Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|---|
| Mint | Leaf spot <i>Ramularia</i> spp., <i>Alternaria</i> spp., <i>Phoma</i> spp. Powdery mildew <i>Erysiphe</i> spp. Rust <i>Puccinia</i> spp. | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 14 |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Willowood Pyrac 2SC can be used with adjuvants in mint. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Resistance Management. To limit development of resistance, do not apply more than 0.78 lb ai pyraclostrobin (48 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|--|
| Oats | Crown rust <i>Puccinia coronata</i> Helminthosporium leaf spot <i>Drechslera avenae</i> Leaf blotch <i>Pyrenophora avenae</i> Leaf rust <i>Puccinia</i> spp. | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|---|
| | Septoria blotch and stem rot <i>Septoria avenae</i> , <i>Phaeosphaeria avenaria</i> , <i>Stagnospora avenae</i> Spot blotch <i>Bipolaris</i> spp. Stem rust <i>Puccinia graminis</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing the disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

Do not harvest oat hay or feed green-chopped oats within 14 days of last application.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*For early season control of leaf blotch, Septoria blotch and stem rot, and spot blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------------|--|---|--|---|---|
| Oilseed Crops | Pasmo | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 21 |
| Flax seed | <i>Septoria linicola</i> | | | | |
| Rapeseed | Blackleg <i>Leptosphaeria maculans</i> Blackspot <i>Alternaria</i> spp. | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|-----------|--|---|--|---|---|
| Sunflower | Alternaria leaf spot <i>Alternaria</i> spp. Cercospora leaf spot <i>Cercospora helianthi</i> Downy mildew <i>Plasmopara halstedii</i> Powdery mildew <i>Erysiphe cichoracearum</i> Rust <i>Puccinia helianthi</i> <i>Uromyces</i> spp. Septoria leaf spot <i>Septoria</i> spp. White rust <i>Albugo tragopogonis</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Flax seed. Apply Willowood Pyrac 2SC at mid-flowering (7 to 10 days after flower initiation). Make a second application 7 to 10 days later if disease persists or if weather conditions are favorable for disease development.

Rapeseed. For control of blackleg, apply Willowood Pyrac 2SC at 2- to 4-leaf stage. For control of blackspot, apply Willowood Pyrac 2SC at early pod development. A second application 7 to 10 days later can be made if disease persists or if weather conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Willowood Pyrac 2SC can be used with adjuvants in oilseed crops. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per year for **sunflower** includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|--|---|--|--|---|
| Oilseed Crops <i>(continued)</i> Borage Calendula Castor oil plant Chinese tallowtree Crambe Cuphea Echium Euphorbia Evening primrose Gold of pleasure (Camelina) Hare's ear mustard Jojoba Lesquerella Lunaria Meadowfoam Milkweed Mustard seed Niger seed Oil radish Poppy seed Rose hip Safflower Sesame Stokes aster Sweet rocket Tallowwood Teal oil plant Vernonia | <i>Alternaria</i> spp. <i>Septoria</i> spp. | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 21 |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in oilseed crops. See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>No livestock feeding restrictions.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Sunflower | | | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| <p>Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.</p> <p>When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.</p> <p>Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.</p> <p>¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet. For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet. For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet. For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet. For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.</p> | | | | | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|--|--|---|---|
| Peanut | Early leaf spot <i>Cercospora arachidicola</i> | 6 to 15 (see details below) | 2 | 45 (0.73 lbs ai/acre) | 14 |
| | Late leaf spot <i>Cercosporidium personatum</i> | | | | |
| | Pepperspot <i>Leptosphaerulina crassiasca</i> | | | | |
| | Rust <i>Puccinia arachidis</i> | | | | |
| | Web blotch <i>Phoma arachidicola</i> | 9 to 15 | | | |
| | Rhizoctonia limb rot, | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | Peg rot, Pod rot <i>Rhizoctonia solani</i> | | | | |
| | Sclerotium rot, Southern stem rot, Southern blight, and White mold <i>Sclerotium rolfsii</i> | | | | |
| | Suppression Only: Sclerotinia blight <i>Sclerotinia minor</i> | | | | |
| | Cylindrocladium black rot <i>Cylindrocladium crotalariae</i> | 12 to 15 | | | |

Applications Directions. For control of early and late leaf spot, pepperspot, rust and web blotch, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development. When using a 14-day spray interval, apply Willowood Pyrac 2SC at 6 to 12 fluid ounces per acre. At spray intervals between 14 and 21 days, apply Willowood Pyrac 2SC at 9 to 15 fluid ounces per acre.

For control of Rhizoctonia and Sclerotium, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14- to 28-day interval. For intervals greater than 14 days, use 15 fluid ounces per acre.

Use the higher rate and/or shorter interval when disease pressure is high or in fields with a history of disease.

Willowood Pyrac 2SC can be used with adjuvants in peanut; however, mixes with silicone-containing adjuvants may cause crop injury under certain conditions. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Peanut meal can be fed. Do not graze or harvest for forage use.

Resistance Management. To limit development of resistance, do not apply more than 0.73 lb ai pyraclostrobin (45 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. In spray programs where four (4) or less fungicide applications are made in a year, Willowood Pyrac 2SC should be alternated with at least one (1) application of a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per year includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Peanut | | | | | | | | | |
|---|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |

| | | | | | | | | | |
|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------|------|------|
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC for peanut in-furrow use.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|-------|--|---|--|--|---|
| Pecan | Pecan scab <i>Cladosporium caryigenum</i> | 6 to 7 | 2 | 28 (0.46 lb ai/acre) | 14 |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14-day interval. For optimum performance, apply Willowood Pyrac 2SC early in the spray program (e.g. prepollination and first cover).

Resistance Management. To limit development of resistance, do not apply more than 0.46 lb ai pyraclostrobin (28 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|---|---|--|--|---|
| Potato | Black dot <i>Colletotrichum coccodes</i> Early blight <i>Alternaria solani</i> | 6 to 9 | 1 | 72 (1.18 lbs ai/acre) | 3 |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|---|---|--|--|---|
| | Late blight <i>Phytophthora infestans</i> Powdery mildew <i>Erysiphe</i> spp. <i>Leveillula taurica</i> <u>Suppression Only:</u> White mold <i>Sclerotinia sclerotiorum</i> | 6 to 12 | | | |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications at 7- to 14-day intervals prior to disease development. The low rate and longer interval can be used early season prior to the observance of symptoms and when disease pressure is low. For control of late blight, follow Willowood Pyrac 2SC application with a labeled non-Group 11 fungicide with a different mode of action 5 to 7 days later.</p> <p>Use the higher rates and/or shorter intervals once disease has been confirmed in your area or weather conditions are favorable to disease development.</p> <p>No livestock feeding restrictions.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than one (1) Willowood Pyrac 2SC application before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> <p>*The maximum product rate per year includes the combination of in-furrow and foliar uses.</p> | | | | | |

In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Potatoes

Use 0.4 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. For applications on 32-inch or 34-inch rows, the maximum application rate is 0.73 fl oz/1000 row feet. Apply at planting as an in-furrow spray by directing spray pattern to uniformly cover seed pieces and surrounding soil. The spray pattern must be a 4- to 8-inch band applied to the seed piece prior to being covered with soil.

When Rhizoctonia disease pressure conditions are expected to be severe or if the field has a history of Rhizoctonia infestations, use Willowood Pyrac 2SC at 0.6 to 0.8 fl oz per 1000 row feet and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

Use a minimum volume of application of 5 gallons of water per acre.

| Willowood Pyrac 2SC Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | |
|--|-------------------------------------|---------------------------|--------------|--------------|--------------|
| | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.4 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.6 | 10.0 | 9.6 | 9.0 | 8.6 | 8.1 |
| 0.8 | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

¹For 32-inch or 34-inch rows, use a maximum of 0.73 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|--|
| Rye | Leaf rust <i>Puccinia recondita</i> Leaf spot <i>Pyrenophora</i> spp. Powdery mildew <i>Erysiphe graminis</i> Septoria leaf and glume blotch <i>Septoria</i> spp., <i>Stagonospora</i> spp. Stem rust <i>Puccinia graminis</i> Stripe rust <i>Puccinia striiformis</i> | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55) |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reduction in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*For early season control of leaf spot and Septoria leaf and glume blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|--|---|
| Sorghum | Anthracnose <i>Colletotrichum graminicola</i> Gray leaf spot <i>Cercospora</i> spp. Northern leaf blight <i>Excerohilum turcicum</i> Rust <i>Puccinia</i> spp. Southern leaf blight <i>Bipolaris</i> spp. | 6 to 12 | 1 | 12 (0.20 lb ai/acre) | Apply no later than 25% flowering |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development.</p> <p>Use the higher rate when disease pressure is high.</p> <p>Under high disease pressure for Northern leaf blight and Southern leaf blight, apply 9 to 12 fl ozs per acre.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.20 lb ai pyraclostrobin (12 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than one (1) Willowood Pyrac 2SC application per year. If additional fungicide applications are needed, use a labeled non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------|---|---|--|--|---|
| Soybean | Alternaria leaf spot <i>Alternaria</i> spp. Anthracnose <i>Colletotrichum truncatum</i> Asian soybean rust <i>Phakopsora pachyrhizi</i> Brown spot <i>Septoria glycines</i> Cercospora blight <i>Cercospora kikuchii</i> | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 21 |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | Frogeye leaf spot <i>Cercospora sojina</i> | | | | |
| | Pod and stem blight <i>Diaporthe phaseolorum</i> | | | | |
| | Rhizoctonia aerial blight <i>Rhizoctonia solani</i> | | | | |
| | Suppression Only: Southern blight <i>Sclerotium rolfsii</i> | 12 | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

For control of soybean rust, apply Willowood Pyrac 2SC prior to infection.

Willowood Pyrac 2SC can be used with adjuvants in soybeans. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Soybean forage can be fed no sooner than 14 days after last application.

Soybean hay can be fed no sooner than 21 days after last treatment.

Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per year includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Soybean | | | | | | | | | |
|---|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a | | | | | | | | | |

minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC fungicide Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|---|---|--|--|---|
| Succulent Shelled Peas and Beans | Alternaria leaf and pod spot <i>Alternaria</i> spp. | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 7 |
| Pigeon pea | Anthrachnose <i>Colletotrichum</i> spp. | | | | |
| Vigna spp. | | | | | |
| Black-eyed pea | Ascochyta blight | | | | |
| Cowpea | <i>Phoma exigua</i> | | | | |
| Southern pea | <i>Ascochyta</i> spp. | | | | |
| Pisum spp. | | | | | |
| Broad bean | Asian soybean rust | | | | |
| English pea | <i>Phakopsora pachyrhizi</i> | | | | |
| Garden pea | | | | | |
| Green pea | Cercospora leaf spot <i>Cercospora</i> spp. | | | | |
| Phaseolus spp. | | | | | |
| Lima bean, green | Downy mildew <i>Phytophthora nicotianae</i> , <i>P. phaseoli</i> | | | | |
| | Mycosphaerella blight <i>Mycosphaerella</i> spp. | | | | |
| | Powdery mildew <i>Erysiphe polygoni</i> | | | | |
| | Rust <i>Uromyces appendiculatus</i> | | | | |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|----------------|---|--|--|---|
| <p>Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in succulent shelled peas and beans. See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|--|---|
| Sugar Beet (roots and tops) | <p>Cercospora leaf spot <i>Cercospora beticola</i></p> <p>Powdery mildew <i>Erysiphe betae</i></p> | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 7 |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14-day interval.</p> <p>Use the higher rate when disease pressure is high.</p> <p>Willowood Pyrac 2SC applications will aid in the control of Rhizoctonia stem canker and crown rot.</p> <p>In sugar beet, Willowood Pyrac 2SC can be combined with low rates of crop oil concentrate (COC), methylated seed oil (MSO), and nonionic surfactant (NIS) adjuvants. Do not use silicone-containing adjuvants. Some combinations and rates may result in temporary crop injury.</p> <p>Willowood Pyrac 2SC Tank Mixes. Willowood Pyrac 2SC can be tank mixed with herbicides such as Poast® herbicide, Select® herbicide (or Willowood Clethodim 2EC), Assure® II herbicide or Prism® herbicide for postemergence control of grasses in sugar beet. Do not use silicone-based adjuvants in such combinations. Willowood Pyrac 2SC tank mix combinations can include COC or MSO; however, crop injury may result. The level of injury tends to increase with increasing rates of COC or MSO. Tank mixtures may only be applied to crops approved for both pyraclostrobin and the tank mix partner(s).</p> <p>See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>No livestock feeding restrictions.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.78 lb ai pyraclostrobin (48 fl ozs of Willowood Pyrac 2SC) per acre per year.</p> <p>Do not make more than one (1) Willowood Pyrac 2SC application before the 4-leaf stage of plant growth. After the 4-leaf stage of plant growth, do not make more than (1) Willowood Pyrac 2SC application before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> <p>*The maximum product rate per year includes the combination of in-furrow and foliar uses.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Sugar Beet | | | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.
 For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.
 For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.
 For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.
 For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------------|---|--|--|---|---|
| Sugarcane* | Brown Rust <i>Puccinia melanocephala</i> Orange Rust <i>Puccinia kuehnii</i> | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 14 |

Applications Directions. For optimal disease control, begin applications of Willowood Pyrac 2SC prior to disease development and continue on a 14- to 28-day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, do not apply more than 48 fl ozs of Willowood Pyrac 2SC per acre per year.

Do not make more than two (2) sequential applications of Willowood Pyrac 2SC before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*Not for use in California.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) | | | | | |
|---|---|--|--|---|---|---------|--|--|--|--|
| Tuberous and Corm Vegetables Subgroup Arracacha Arrowroot Chinese artichoke Jerusalem artichoke Cassava (bitter and sweet) Chayote (root) Chufa Dasheen Edible canna Ginger Leren Sweet Potato Tanier True yam Turmeric Yam bean | Downy mildew <i>Plasmopara</i> spp. | 6 to 12 | 1 | 72 (1.18 lbs ai/acre) | 3 | | | | | |
| | Leaf spot <i>Cercospora</i> spp., <i>Alternaria</i> spp. | | | | | | | | | |
| | Powdery mildew <i>Erysiphae</i> spp., <i>Leveillula taurica</i> | | | | | | | | | |
| | Rust <i>Uromyces</i> spp. <i>Puccinia</i> spp. | | | | | | | | | |
| | Black dot <i>Colletotrichum coccodes</i> | | | | | 6 to 9 | | | | |
| | Early blight <i>Alternaria solani</i> | | | | | | | | | |
| | Late blight <i>Phytophthora infestans</i> | | | | | 6 to 12 | | | | |
| | Powdery mildew <i>Erysiphe</i> spp., <i>Leveillula taurica</i> | | | | | | | | | |
| | Suppression Only: White mold <i>Sclerotinia sclerotiorum</i> | | | | | | | | | |
| | Applications Directions. Begin Willowood Pyrac 2SC applications at 7- to 14-day intervals prior to disease development. The low rate and longer interval can be used early season prior to the observance of symptoms and when disease pressure is low. For control of late blight , follow Willowood Pyrac 2SC application with a labeled fungicide with a different mode of action 5 to 7 days later. | | | | | | | | | |
| | Use the higher rates and shorter intervals once disease has been confirmed in your area or if weather conditions are favorable for disease development. | | | | | | | | | |
| | No livestock feeding restrictions. | | | | | | | | | |
| | Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per year. | | | | | | | | | |
| | Do not make more than one (1) Willowood Pyrac 2SC application before alternating to a labeled non- | | | | | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|----------------|---|--|--|---|
| Group 11 fungicide with a different mode of action. | | | | | |
| *The maximum product rate per year includes the combination of in-furrow and foliar uses. (For above-listed crops, in-furrow use is permitted in potato only.) | | | | | |

In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Potatoes

Use 0.4 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. For applications on 32-inch or 34-inch rows, the maximum application rate is 0.73 fl oz/1000 row feet. Apply at planting as an in-furrow spray by directing spray pattern to uniformly cover seed pieces and surrounding soil. The spray pattern must be a 4- to 8-inch band applied to the seed piece prior to being covered with soil.

When Rhizoctonia disease pressure conditions are expected to be severe or if the field has a history of Rhizoctonia infestations, use Willowood Pyrac 2SC at 0.6 to 0.8 fl oz per 1000 row feet and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

Use a minimum volume of application of 5 gallons of water per acre.

| Willowood Pyrac 2SC Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | |
|--|-------------------------------------|---------------------------|--------------|--------------|--------------|
| | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.4 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.6 | 10.0 | 9.6 | 9.0 | 8.6 | 8.1 |
| 0.8 | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| ¹ For 32-inch or 34-inch rows, use a maximum of 0.73 fl oz per 1000 row feet. | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------------------|---|---|--|--|--|
| Wheat and Triticale | Black point Kernal smudge <i>Alternaria</i> spp., <i>Helminthosporium</i> spp. | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) |
| | Leaf rust <i>Puccinia triticina</i> | | | | |
| | Powdery mildew <i>Erysiphe graminis</i> f. sp., <i>tritici</i> | | | | |
| | Septoria leaf and glume blotch <i>Septoria</i> spp., <i>Stagonospora</i> spp. | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | Spot blotch <i>Cochliobolus sativus</i> Stem rust <i>Puccinia graminis f. sp., tritici</i> Stripe rust <i>Puccinia striiformis f. sp., tritici</i> Tan spot Yellow leaf spot <i>Pyrenophora</i> spp. | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

Do not harvest wheat hay or feed greed-chopped wheat within 14 days after last application.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs Willowood Pyrac 2SC) per acre per year.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*For early season control of tan spot, Septoria leaf and glume blotch, and spot blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

PESTICIDE DISPOSAL: Wastes resulting from use of this product may be disposed of on-site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Nonrefillable Container (greater than five gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Steps to be taken in case material is released or spilled:

- In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.
- Dike and contain the spill with inert materials (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Willowood, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Willowood, LLC and Seller harmless for any claims relating to such factors.

Willowood, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Willowood, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither Willowood, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF WILLOWOOD, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE**

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[EPA approval date]

Kasprzyk, Kiryssa

From: Mike Kellogg <Mike@PyxisRC.com>
Sent: Friday, May 13, 2016 1:35 PM
To: Kasprzyk, Kiryssa
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)
Attachments: 087290-000AG.20160513v4.Willowood Pyrac 2SC lbl.tracked changes.pdf;
087290-000AG.20160513v4.Willowood Pyrac 2SC lbl.changes incorporated.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Kiryssa,

Attached please find a tracked and clean version of the label incorporating your comments.

Regards,
Mike Kellogg
Pyxis Regulatory Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332
T: 253-853-7369
F: 253-853-5516

From: Kasprzyk, Kiryssa [mailto:Kasprzyk.Kiryssa@epa.gov]
Sent: Friday, May 13, 2016 8:45 AM
To: Mike Kellogg
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)

Hi Mike,

Hopefully this will be the last label iteration.

We just got some directives from the Product Managers to change (back) the First Aid statement under "If swallowed" to include the "by mouth" phrase. We'll need this added back in.

I did another look and it seems I missed a few of the "seasons" that needed to be changed to "year." I then did an extra check using "Find" to make sure that I didn't miss any more. While changing one of those instances, I realized that the highlighted language on Page 4 isn't super clear. I gave a suggestion for how to change it, but if you all are trying to stay as similar as possible to the Headline label, you can keep it as is, just with "per year."

Thanks,
Kiryssa

From: Mike Kellogg [mailto:Mike@PyxisRC.com]
Sent: Friday, May 06, 2016 3:49 PM
To: Kasprzyk, Kiryssa <Kasprzyk.Kiryssa@epa.gov>
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)

Thank you.

Kasprzyk, Kyrssa

From: Mike Kellogg <Mike@PyxisRC.com>
Sent: Friday, May 06, 2016 3:49 PM
To: Kasprzyk, Kyrssa
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)
Attachments: 087290-000AG.20160506v3.Willowood Pyrac 2SC lbl.tracked changes.pdf;
087290-000AG.20160506v3.Willowood Pyrac 2SC lbl.changes incorporated.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Thank you.

I've attached both a clean and tracked changes version of the label incorporating your comments.

I've also added language and reformatted the 1st page to make it clear what language will appear on the front panel of the booklet and what will appear inside the booklet.

Should you have any additional changes, please let me know.

Regards,
Mike Kellogg
Pyxis Regulatory Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332
T: 253-853-7369
F: 253-853-5516

From: Kasprzyk, Kyrssa [mailto:Kasprzyk.Kyrssa@epa.gov]
Sent: Friday, May 06, 2016 12:11 PM
To: Mike Kellogg
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)

Hi Mike,

I did a quick CBI check of the reviews, and have attached them here. You'll notice the different Precautionary Statements in the Acute Tox Memo, and the addition of the Hazards statement at the end of the Product Chem Review.

The PPE revisions were something that I noticed and recommended changing, so you won't find that in the reviews. After taking a closer look at the Acute Tox profile, I realized that the PPE on the Headline label was overprotective. Also, the Label Review Manual also no longer requires water-based formulations to have chemical resistant gloves.

On another note, I *just* reviewed the Headline label, but didn't catch some of these things until I looked more closely at this new label. So, the differences will remain until next time BASF submits an amendment. Hopefully California won't give you too much trouble.

Regards,
Kyrssa

From: Mike Kellogg [mailto:Mike@PyxisRC.com]
Sent: Friday, May 06, 2016 2:30 PM
To: Kasprzyk, Kiryssa <Kasprzyk.Kiryssa@epa.gov>
Subject: RE: Willowood Pyrac 2SC Label Revisions (87290-AG)

Kiryssa,

Thank you for your email. Would it be possible to receive the science reviews? Once registered and we submit our registration application to California, we'll need to be able to justify why the precautionary language, etc. differs from BASF's Headline SC, the product we are me-too'ing.

I am fine with sending them via email.

Regards,
Mike Kellogg
Pyxis Regulatory Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332
T: 253-853-7369
F: 253-853-5516

From: Kasprzyk, Kiryssa [mailto:Kasprzyk.Kiryssa@epa.gov]
Sent: Friday, May 06, 2016 9:35 AM
To: Mike Kellogg
Subject: Willowood Pyrac 2SC Label Revisions (87290-AG)

Hi Mike,

I received the reviews back from our science divisions on Willowood Pyrac 2SC (87290-AG). They recommended a few changes and additions to the Precautionary Statements and First Aid. A Physical and Chemical Hazards statement must be added.

I also had another reviewer take a look at the label, and we caught a few more changes that will need to be made. I've attached the previous highlighted version that you sent to me, and made all the extra revisions – highlighted in turquoise. If you have any issues seeing my changes, all the comments are visible in the "Comments" pane on Adobe.

Please let me know if you have any questions or would like to go through any of the comments over the phone.

Thanks,
Kiryssa

Kiryssa Kasprzyk
Biologist - U.S. EPA
OCSPP - Office of Pesticide Programs
Registration Division - Fungicide Branch
(703) 347-8429
kasprzyk.kiryssa@epa.gov
PYS 7315

Kasprzyk, Kiryssa

From: Mike Kellogg <Mike@PyxisRC.com>
Sent: Monday, March 28, 2016 2:17 PM
To: Kasprzyk, Kiryssa
Subject: RE: Label Revisions for New Product - Willowood Pyrac 2SC (EPA Reg# 87290-AG)
Attachments: 087290-000AG.20160328v2.Willowood Pyrac 2SC lbl.tracked changes.pdf;
087290-000AG.20160328v2.Willowood Pyrac 2SC lbl.changes incorporated.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Kiryssa,

Revised label attached, both tracked and clean version. Should you require anything further, please do not hesitate to contact me.

Regards,
Mike Kellogg
Pyxis Regulatory Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332
T: 253-853-7369
F: 253-853-5516

From: Kasprzyk, Kiryssa [mailto:Kasprzyk.Kiryssa@epa.gov]
Sent: Wednesday, March 23, 2016 1:28 PM
To: Mike Kellogg
Subject: Label Revisions for New Product - Willowood Pyrac 2SC (EPA Reg# 87290-AG)

Mike,

I'm currently reviewing the application for the new product, Willowood Pyrac 2SC. I've finished my review of the label, and it will need some revisions.

I reviewed the label against the product that Willowood is claiming substantial similarity to, Headline SC (EPA Reg# 7969-289), and confirmed that there were no new uses and the application rates and directions for use are the same. Interestingly enough, BASF concurrently submitted a label amendment for Headline to me, so we will need to incorporate the major changes that BASF made to the Headline label into the Pyrac label.

There are several other small changes needed for the Pyrac label in addition to the Headline changes. I've attached a highlighted pdf with my comments in turquoise. To summarize:

1. All per season language needs to be changed to per year.
2. Use on sugarcane in California is not allowed.
3. The referral statement needs to be changed to be more specific.

Please take a look at my comments and give me a call/email to let me know if you have any questions.

Thank you.



FEE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
OFFICE OF PESTICIDE PROGRAMS REGISTRATION DIVISION (7505P)

~~DOCUMENT CONTAINS CONFIDENTIAL INFORMATION~~

DP BARCODE No.: D432177; **FILE SYMBOL No.:** 87290-AG; **PRODUCT NAME:** Willowood Pyrac 2SC; **DECISION No.:** 514296; **PC Code(s):** 099100; **ACTION CODE:** R301; **FOOD Use:** Yes;
COMPANY NAME: Willowood LLC

DATE OUT: April 6, 2016

SUBJECT: End Use Product Chemistry Review
Product Name: Willowood Pyrac 2SC

FROM: Shyam Mathur, Ph.D
Product Chemistry Team Leader
CITAB/RD (7505P)

SB Mathur
4/6/16
SCR

TO: Kiryssas Kasprzyk / Tony Kish, RM 22
Fungicide Branch / RD (7505P)

INTRODUCTION:

The registrant has submitted an application for the registration of the end use product Willowood Pyrac 2SC. The registrant has submitted a CSF for basic formulation (dated 02-23-2016). In support of the proposed basic CSF, the registrant has submitted group A & group B product chemistry data with MRID Nos. 49846401 to 49846404. CITAB has been asked to determine the acceptability of the proposed basic CSF and the supported product chemistry.

SUMMARY OF FINDINGS:

1. Name of Active Ingredient(s): Pyraclostrobin (23.3%)

2. Has the registrant claimed substantial similarity to a registered product?

[] Yes; [X] No; [] NA; if yes, give the registration number of the cited product.

Reg. No.

3. All of the source materials of the active ingredient are derived from registered sources: [X] Yes [] No

4. All inert ingredients have been screened by IIAB and found to be approved for the proposed labeled Uses: [X] Yes; [] No

DP BARCODE No.: D432177; **FILE SYMBOL No.:** 87290-AG; **PRODUCT NAME:** Willowood Pyrac
2SC; **DECISION No.:** 514296; **PC Code(s):** 099100; **ACTION CODE:** R301; **FOOD Use:** Yes;
COMPANY NAME: Willowood LLC

5. Confidential Statement of Formula(s):

☒ Proposed Basic - Dated: 02-23-2016; Re-submitted – Dated:

☐ Proposed Alternate CSF – Dated;; Re-submitted – Dated:

Alternate CSF(s) complies with 40CFR§152.43: ☐ Yes; ☐ No; ☒ NA

6. Product label

a. Ingredient statement: Nominal concentration of AI listed on CSF(s) concurs with product label (PR Notice 91-2).

☒ Yes; ☐ No; if not, explain below:

Is the sub statement in compliance with PR Notice 97-6 (inert ingredient vs other ingredient)

☒ Yes; ☐ No; if not, explain below:

Metallic equivalent: ☐ Yes ☒ NA
Soluble arsenic: ☐ Yes ☒ NA
Isomeric ratios: ☐ Yes ☒ NA
Acid Equivalent: ☐ Yes ☒ NA;

b. Health related sub statements: Product contains?

Petroleum distillate at > 10%: ☐ Yes ☐ No ☐ NA
Methanol at > 4%: ☐ Yes ☐ No ☒ NA
Sodium nitrate/Sodium Nitrite ☐ Yes ☐ No ☒ NA

c. Physical chemical hazard statement: Product label requires a statement per 40 CFR §156.78 for flammability, explosive potential or electric insulator breakdown?

☐ Yes; ☒ No

Is the sub statement in compliance with PR Notice 98-6 (Total Release Fogger)?

☐ Yes; ☐ No; ☒ NA; if not, explain below

d. Label requires an additional Storage and Disposal statement:

☐ Yes; ☒ No; if yes explain below:

DP BARCODE No.: D432177; **FILE SYMBOL No.:** 87290-AG; **PRODUCT NAME:** Willowood Pyrac 2SC; **DECISION No.:** 514296; **PC Code(s):** 099100; **ACTION CODE:** R301; **FOOD Use:** Yes; **COMPANY NAME:** Willowood LLC

7. Group A: Product Chemistry Data submitted

CITAB's determination of the acceptability for the proposed product is listed in the tables below.

| Guideline No. | Study Title | | Data submitted | | CITAB's Assessment of Data | MRID Nos. |
|---------------|--|--|----------------|----|----------------------------|----------------------------|
| | | | Yes | No | | |
| 830.1550 | Product Identity & Composition | | X | | A | 49846401 |
| 830.1600 | Description of materials used to produce the product | | X | | A | 49846401 |
| 830.1650 | Description of formulation process | | X | | A | 49846401 |
| 830.1670 | Discussion on the formation of impurities | | X | | A | 49846401 |
| 830.1700 | Preliminary analysis | | | | A | |
| 830.1750 | Certified limits (158.350) | | | | | Basic CSF dated 02-23-2016 |
| | | | | | | |
| | | | | | | |
| 830.1800 | Enforcement analytical method | | X | | A | 49846401 49846403 |

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver Request, I = In Progress, NA = Not Applicable; U = Upgradeable.

DP BARCODE No.: D432177; **FILE SYMBOL No.:** 87290-AG; **PRODUCT NAME:** Willowood Pyrac
2SC; **DECISION No.:** 514296; **PC Code(s):** 099100; **ACTION CODE:** R301; **FOOD Use:** Yes;
COMPANY NAME: Willowood LLC

8. **Group B: Physical-chemical characteristics**

| Guideline No. | Study Title | Value or Qualitative Description | CITAB's Assessment of Data | MRID Nos. |
|---------------|---------------------------------------|--|----------------------------|-----------|
| 830.6303 | Physical State | Liquid | A | 49846402 |
| 830.6314 | Oxidation/reduction | Compatible with water, 5% ammonium phosphate, Fe powder and Aromatic 200 Fluid. Incompatible with 5% potassium permanganate | A | 49846402 |
| 830.6315 | Flammability | Waiver. Does not contain any combustible liquid | A | 49846404 |
| 830.6316 | Explosibility | Does not contain any explosive properties | A | 49846404 |
| 830.6317 | Accelerated Storage stability | stable for 14 days at 54°C when stored in HDPE containers. | A | 49846403 |
| 830.6320 | Accelerated Corrosion characteristics | No changes in the appearance or integrity of the storage container were observed over the storage interval. The containers showed minimal weight loss over the storage interval. | A | 49846403 |
| 830.7000 | pH | 6.43 (1% dispersion) @ 25°C | A | 49846402 |
| 830.7100 | Viscosity | 100(speed)/396 cPs/24°C 100(speed)/308 cPs/40°C | A | 49846402 |
| 830.7300 | Density | 1.08 g/cc (9.01 lbs/gal) @ 23°C | A | 49846402 |

A = Acceptance, N = Not Acceptable, G = Data Gap, W = Waiver request, NA = Not applicable, I = In progress

DP BARCODE No.: D432177; FILE SYMBOL No.: 87290-AG; PRODUCT NAME: Willowood Pyrac
2SC; DECISION No.: 514296; PC Code(s): 099100; ACTION CODE: R301; FOOD Use: Yes;
COMPANY NAME: Willowood LLC

CONCLUSIONS:

CITAB has reviewed the product chemistry data submitted for the end-use product and has concluded that:

A. Substantial similarity to the cited product (Reg. No. -----) from Product chemistry view point

- ☐ Similar
☐ Not similar, give reasons:
☐ Identical to the cited product in chemical composition
☐ Not identical
☒ Not applicable

B. Confidential Statement of formula

1. Basic CSF (dated 02-23-2016)
☒ Acceptable
☐ Not Acceptable
☐ Not Applicable
2. Alternate CSF #1 & #2 (dated...)
☐ Acceptable
☐ Not Acceptable
☒ Not Applicable

C. Group A Product Chemistry Data

- ☒ Acceptable
☐ Not acceptable
☐ Acceptable with the exception of the guideline:
☐ Not required
☐ Data cited

D. Group B Product chemistry data

- ☒ Acceptable
☐ Not acceptable
☐ Acceptable with the exception of Guideline(s): (provide the guideline number & explain)
☐ Not required
☐ Data cited

E. Product Label/Draft Label

Recommendations – Yes ☒; No ☐

Since the product was found to be incompatible with oxidizing agents, the registrant is recommended to add the following statement under Physical-Chemical Hazards on the product label:

“Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur”



Screen



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION
OFFICE OF PESTICIDE PROGRAMS REGISTRATION DIVISION (7505P)

DP BARCODE No.: D432177; **FILE SYMBOL No.:** 87290-AG (screen); **PRODUCT NAME:** Willowood Pyrac 2SC; **DECISION No.:** 514296; **PC Code(s):** 099100; **ACTION CODE:** R301; **FOOD Use:** Yes

DATE OUT: March 11, 2016

SUBJECT: 45/90 day screen results for end use product "Willowood Pyrac 2 SC"

FROM: Shyam Mathur, Product Chemistry Team Leader, CITAB / RD (7505P)

TO: Kiryssa Kasprzyk / Tony Kish, RM 22; Fungicide Branch / RD (7505P)

Company Name: Willowood LLC
Active Ingredient(s): Pyraclostrobin (23.3%)
MRID No(s): 49846401 to 49846404

CONCLUSION:

Deficiencies: No

(if there are deficiencies they are indicated below each heading as Note 1, Note 2 Etc)

Group A: All data submitted

Note to reviewer: validation of EAM is submitted under MRID 49846403

Group B: All data submitted along with waiver request

CSF: Basic CSF (dated 02-23-2016) submitted

DRAFT PRODUCT LABEL: Submitted

Note to PM: If the deficiencies are found in the screen results, please inform the registrant and bring back to the author of this report the corrected deficiencies in response to 10 day letter. The corrected deficiencies will be attached to the original bean, if the data package is still in CITAB. New Bean is required in case the bean has been closed by CITAB. Thank you.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

March 02, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

PYXIS REGULATORY CONSULTING, INC.
WILLOWOOD, LLC
4110 136TH ST. CT. NW
GIG HARBOR, WA 98332

Report of Analysis for Compliance with PR Notice 11-03

Thank you for your submittal of 25-FEB-16. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 11-03. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND
POLLUTION PREVENTION

OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION

29/MAR/2016

SIMILARITY CLINIC MEMORANDUM

Subject: Name of Pesticide Product: Willowood Pyrac 2SC
EPA Reg. No. /File Symbol: 87290-AG
DP Barcode: D432173
Decision No: 514296
Action Code: R301
PC Code: 099100 (pyraclostrobin)

From: Eugenia McAndrew, Biologist *Eugenia McAndrew*

Through: John C. Redden, M.S., Senior Risk Assessor *JCR*
Chemistry, Inerts and Toxicology Assessment Branch
Registration Division (7505P)

To: Kyrissa Kasprzyk, Risk Manager Team 22
Fungicide Branch
Registration Division (7505P)

Applicant: Willowood, LLC
1600 NW Garden Valley Blvd., Suite 120
Roseburg, OR 97471

FORMULATION FROM LABEL:

| <u>Active Ingredient(s):</u> | <u>% by wt.</u> |
|------------------------------|-----------------|
| Pyraclostrobin | 23.3 |
| Other ingredients: | <u>76.7</u> |
| Total: | 100.0 |

ACTION REQUESTED: Similarity determination for 87290-AG, proposed product, and 7969-289, cited product.

BACKGROUND: Willowood, LLC has applied for registration of Willowood Pyrac 2SC, EPA File Symbol 87290-AG, claiming to be substantially similar to Headline SC Fungicide, EPA Reg. No. 7969-289. Both products contain 23.3% pyraclostrobin. The submission includes a basic CSF dated February 23, 2016, label, data matrix and company letter.

The registrant is using the selective method of data support to satisfy the acute toxicity data requirements. The data matrix cites the following acute toxicity studies: acute oral (MRID 47523706), acute dermal (MRID 47523707), acute inhalation (MRID 47523708), primary eye irritation (MRID 47523709), primary dermal irritation (MRID 47523710) and dermal sensitization (MRID 47523711). A search of the OPP electronic databases shows that these studies were submitted to support the registration of the cited product, 7969-289. They were reviewed and classified as acceptable in a 2009 Technical Review Branch/Registration Division memo (Backus; D361709; EPA File Symbol 7969-EIO; 07/APR/2009).

RECOMMENDATIONS:

1. We compared the basic CSFs and labels of the proposed product, 87290-AG, and the cited product, 7969-289, and determined that the two products are substantially similar. The cited acute toxicity data may be used to support this registration.

2. The acute toxicity profile for the proposed product, Willowood Pyrac 2SC, EPA File Symbol 87290-AG, is as follows:

| | | | |
|---------------------------|----------|-------|---------------|
| acute oral toxicity | II | cited | MRID 47523706 |
| acute dermal toxicity | IV | cited | MRID 47523707 |
| acute inhalation toxicity | IV | cited | MRID 47523708 |
| primary eye irritation | III | cited | MRID 47523709 |
| primary skin irritation | III | cited | MRID 47523710 |
| dermal sensitization | negative | cited | MRID 47523711 |

3. The proposed basic CSF submitted for 87290-AG must be reviewed and accepted by the product chemists in the Chemistry, Inerts and Toxicology Assessment Branch.

LABELING: Based on the toxicity profile above, the following are the precautionary and first aid statements for this product as obtained from the Label Review System:

PRODUCT ID #: 087290-00063

PRODUCT NAME: Willowood Pyrac 2SC

PRECAUTIONARY STATEMENTS

SIGNAL WORD: WARNING

SPANISH SIGNAL WORD: AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

Hazards to Humans and Domestic Animals:

May be fatal if swallowed. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear long-sleeved shirt and long pants, socks, shoes, and waterproof gloves. Wear protective eyewear, if appropriate.

First Aid:

*If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything to an unconscious person.

If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-xxx-xxxx for emergency medical treatment information.

***Note:** The "If swallowed" statement above is the preferred statement for acute oral toxicity categories 1, 2 and 3. The proposed label submitted for 87290-AG has a different statement. If the registrant chooses to use an alternative statement, it must be supported by a medical explanation.

PRIA 3 – 21 Day Content Screen Review Worksheet

(EPA/OPP Use Only)

September 2012

21 Day Screen Start Date: 2-25-16

Experts In-Processing Signature: B.B. Date 2-26-16 Fee Paid: Yes ☒

Division management contacted on issues No ☐ Yes ☐ Date _____

| EPA Reg. Number: <u>87290-AG</u> | | EPA Receipt Date: <u>2-25-16</u> | | | | |
|----------------------------------|---|----------------------------------|----|-----|----|------|
| Items for Review | | | | Yes | No | N/A* |
| 1 | Application Form (EPA Form 8570-1) signed & complete including package type | | | X | | |
| 2 | Confidential Statement of Formula all boxes completed, form signed, and dated (EPA Form 8570-4) | | | X | | |
| | a) All inerts, including fragrances, approved for the proposed uses (see Footnote A) | yes X | no | | | |
| 3 | Certification with Respect to Citation of Data (EPA Form 8570-34) completed and signed (N/A if 100% repack) | | | X | | |
| | Certificate and data matrix consistent | | | X | | |
| | If applicant is relying on data that are compensable, is the offer to pay statement included. (see Footnote B) | yes | no | | | |
| | If applicable, is there a letter of Authorization for exclusive use only. | | | | | |
| 4 | Formulator's Exemption Statement (EPA Form 8570-27) completed and signed (N/A if source is unregistered or applicant owns the technical) | | | X | | |
| | Data Matrix (EPA Form 8570-35) both internal and external copies (PR 98-5) completed and signed (N/A if 100% repack) | | | X | | |
| 5 | a) Selective Method (Fee category experts use) | yes X | no | | | |
| | b) Cite-All (Fee category experts use) | | | | | |
| | c) Applicant owns all data (Fee category experts use) | | | | | |
| 6 | 5 Copies of Label (Electronic labels on CD are encouraged and guidance is available) | | | X | | |
| 7 | Is the data package consistent with PR Notice 86-5 | | | X | | |
| 8 | Notice of Filing included with petitions | | | | | X |

| | | | | |
|---|--|--|--|---|
| 9 | If applicable for conventional applications, <u>reduced risk rationale</u> | | | X |
| 10 | <u>Required Data</u> and/or data waivers. See Footnote C. | | | |
| | a) List study (or studies) not included with application | | | |
| <p>Comments:</p> <p>Documentation <u>Pass</u> or Fail - All Required forms complete</p> <p>Inerts <u>Pass</u> or Fail - Inerts Approved for Pre-Harvest Food Use</p> <p>PAN 1103: <u>Pass</u> or Fail - MRID: 498464</p> <p>Overall Status: <u>Pass</u> or Fail</p> <p>3/2/16</p> | | | | |

R 300 and 301

100% identical (repack): YES or NO (circle one)

{If **yes**, it's a 100% repack - then product chemistry, acute toxicity and efficacy data are not required}

Data on Group A and B must be submitted - Group A and B can not be cited.

| Guideline No. | Group A: Product Chemistry Data Study Title | Data submitted | |
|---------------|--|----------------|----|
| | | Yes | No |
| 830.1550 | Product Identity & Composition | X | |
| 830.1600 | Description of materials used to produce the product | X | |
| 830.1650 | Description of formulation process | X | |
| 830.1670 | Discussion on the formation of impurities | X | |
| 830.1700 | Preliminary analysis | X | |
| 830.1750 | Certified limits (158.345) | X | |
| 830.1800 | Enforcement analytical method | X | |

| Guideline No. | Group B: Product Chemistry Data Study Title | Data submitted | |
|---------------|--|----------------|----|
| | | Yes | No |
| 830.6302 | Color | X | |
| 830.6303 | Physical State | X | |
| 830.6304 | Odor | X | |
| 830.6314 | Oxidation/Reduction (Chemical incompatibility) | X | |
| 830.6315 | Flammability | X | |
| 830.6316 | Explodability | X | |
| 830.6317 | Storage stability | X | |
| 830.6319 | Miscibility | X | |
| 830.6320 | Corrosion Characteristics | X | |
| 830.6321 | Dielectric Breakdown voltage | X | |
| 830.7000 | pH | X | |
| 830.7100 | Viscosity | X | |
| 830.7300 | Density | X | |

R 300 and 301

New products must provide a bridging rationale document. The bridging document directs OPP to use a currently registered set of 6 acute toxicity data and label; instead of submitting product specific data.

| Guideline No. | Acute toxicity (6 pack) Study Title | Cited | |
|---------------|-------------------------------------|-------|----|
| | | Yes | No |
| 870.1100 | Acute Oral (LD50) | X | |
| 870.1200 | Acute Dermal (LD50) | X | |
| 870.1300 | Acute Inhalation (LC50) | X | |
| 870.2400 | Acute Eye Irritation | X | |
| 870.2500 | Acute Dermal Irritation | X | |
| 870.2600 | Dermal Sensitization | X | |

Efficacy – which guideline depends on the proposed label use and they must cite the data to be used for the bridging rationale.

| Guideline No. | Efficacy Study Titles | Cited | | Comments |
|---------------|---|-------|----|----------|
| | | Yes | No | |
| 810.3100 | Soil Treatments for Imported Fire Ants | | | N/A |
| 810.3200 | Livestock, Poultry, Fur and Wool-Bearing Animal Treatments | | | N/A |
| 810.3300 | Treatments to Control Pests of Humans and Pets | | | N/A |
| 810.3400 | Mosquito, Black Fly, and Biting Midge (Sand Fly) Treatments | | | N/A |
| 810.3500 | Premises Treatments | | | N/A |
| 810.3600 | Structural Treatments | | | N/A |
| 810.3800 | Methods for Efficacy Testing of Termite Baits | | | N/A |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

February 26, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

OPP Decision Number: D-514296
EPA File Symbol or Registration Number: 87290-AG
Product Name: WILLOWOOD PYRAC 2SC
EPA Receipt Date: 25-Feb-2016
EPA Company Number: 87290
Company Name: WILLOWOOD, LLC

MICHAEL KELLOGG
AGENT FOR WILLOWOOD, LLC
PYXIS REGULATORY CONSULTING, INC.
4110 136TH ST. CT. NW
GIG HARBOR, WA 98332

SUBJECT: Receipt of Registration Amendment Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your amendment and certification of payment. If you submitted data with this application, the results of the PRN-2011-3 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R301
NEW PRODUCT; IDENTICAL OR SUBSTANTIALLY SIMILAR IN COMPOSITION AND
USE TO A REGISTERED PRODUCT; REGISTERED SOURCE OF ACTIVE
INGREDIENT; SELECTIVE DATA CITATION ONLY FOR DATA ON PRODUCT
CHEMISTRY / ACUTE TOXICITY / PUBLIC HEALTH PEST EFFICACY, WHERE
APPLICANT DOES NOT OWN ALL REQUIRED DATA NOR HAS AUTHORIZATION
LETTER FROM DATA OWNER;

No additional payment is due at this time.

If you have any questions, please contact the Pesticide Registration Service Fee
Ombudsman at (703) 308-9362.

Sincerely,

Teresa Downs
Front End Processing Staff

Information Technology & Resources Management Division

Fee for Service

{981785R~

This package includes the following

☒ New Registration

☐ Amendment

☒ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ____

for Division

☐ AD

☐ BPPD

☒ RD

Risk Mgr.

22

Receipt No.

S-

981785

EPA File Symbol/Reg. No.

87290-AG

Pin-Punch Date:

2/25/2016

☐ This item is NOT subject to FFS action.

Action Code:

Requested:

R301

Granted:

R301

Amount Due: \$ 1897-

Parent/Child Decisions:

☒ Inert Cleared for Intended Use



Uncleared Inert in Product

Reviewer: Shanta Adels

Date: 2/26/2016

Remarks:

Receipt for Section 3

S: 981785

Milestone Email:

Regulatory Type: Product Registration - Section 3

Resubmission: ☐ Yes ☒ No

Application Type: New Registration

Fee For Service: ☒ Yes ☐ No

Billable: ☒ Yes ☐ No

Company: 87290 WILLOWOOD, LLC

V

Print Letter

Enter More Information

Tracking

Risk Manager: Registration Division Risk Management Team 22

Product #: 87290-AG Product Name: WILLOWOOD PYRAC 2SC

Overides:

Me Too Section3: 7969-289 Me Too Product Name: Headline SC

Application Date: 23-Feb-2016

OPP Rec'd Date: 25-Feb-2016

Front End Date: 25-Feb-2016

Risk Manager Send Date:

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track: ☐

New Ingredient: ☐

Receipt Description:

NEW REGISTRATION WITH STUDIES

Receipt Content

Study

CSF

View/Edit

Form A

Signature Date:

Form B

Signature Date:



Receipt

Your payment is complete

Pay.gov Tracking ID: 25Q3U986

Agency Tracking ID: 74964767394

Form Name: Pesticide Registration Improvement Act - Prepayment

Application Name: PRIA Service Fees

Payment Information

Payment Type: Debit or credit card

Payment Amount: \$1,897.00

Transaction Date: 02/23/2016 12:32:27 PM EST

Payment Date: 02/23/2016

Registration Number: 87290-xx

Company Name: Willowood, LLC

Company Number: 87290

Action Code: R301

Account Information

Card Holder Name: Brian Heinze

Card Type: Master Card

Card Number: *****3276

Email Confirmation Receipt

Confirmation Receipts have been emailed to:
mike@pyxisRC.com

PYXIS REGULATORY CONSULTING, INC.

4110 136th St. Ct. NW
Gig Harbor, WA 98332

Phone: 253-853-7369
Fax: 253-853-5516
Email: Mike@PyxisRC.com

February 23, 2016

COURIER DELIVERY

Tony Kish (PM 22)
Document Processing Desk (**REGFEE**)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202-4501

RE: Willowood, LLC – Willowood Pyrac 2SC (EPA Reg. No. 87290-)
Application for New Pesticide Registration

Dear Mr. Kish,

On behalf of Willowood, LLC please find the enclosed application for registration of Willowood Pyrac 2SC, an end-use product containing pyraclostrobin as the active ingredient. In support of this application, we submit the following documents:

1. Application for Registration (EPA Form 8570-1)
2. Receipt of PRIA pre-payment from pay.gov
3. Confidential Statement of Formula (Basic Formulation dated February 23, 2016)
4. Formulators Exemption Statement (EPA Form 8570-27)
5. Three (3) copies of the proposed labeling
6. Certification with Respect to Label Integrity
7. Electronic copy of the Willowood Pyrac 2SC label on CD
8. Certification with Respect to Citation of Data (EPA Form 8570-34)
9. Agency Internal Use Copy of the Data Matrix (EPA Form 8570-35)
10. Public File Copy of the Data Matrix (EPA Form 8570-35)
11. Letter of Authorization
12. Product Specific Data:

| | | | |
|-----------------|----------|---|--|
| 49846401 | Volume 1 | 830.1550, 830.1600, 830.1650, 830.1670, 830.1750, 830.1800 | Kellogg, M. Product Identity and Composition, Description of the Materials Used, Description of the Formulation Process, Discussion of the Formation of Impurities, Certified Limits, and Analytical Methods to Verify Certified Limits for Willowood Pyrac 2SC. |
| 49846402 | Volume 2 | 830.6302, 830.6303, 830.6304, 830.6314, 830.7000, 830.7100, 830.7300 | Theus, S. Physical and Chemical Characteristics of Willowood Pyrac 2SC. |
| 49846403 | Volume 3 | 830.6317, 830.6320 | Theus, S. Storage Stability and Corrosion Characteristics of Willowood Pyrac 2SC. |
| 49846404 | Volume 4 | 830.6313, 830.6316, 830.6319, 830.6321, 830.7050, 830.7200, | Kellogg, M. Waiver Request for Certain Data Requirements for Willowood Pyrac 2SC. |



United States
Environmental Protection Agency
Washington, DC 20460

☒ Registration
☐ Amendment
☐ Other

OPP Identifier Number

Application for Pesticide - Section I

| | | |
|--|--|--|
| 1. Company/Product Number 87290- | 2. EPA Product Manager T. Kish | 3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted |
| 4. Company/Product (Name) Willowood, LLC / Willowood Pyrac 2SC | PM# 21 | |
| 5. Name and Address of Applicant (Include ZIP Code) Willowood, LLC c/o Pyxis Regulatory Consulting, Inc. 4110 136th St. Ct. NW Gig Harbor, WA 98332 <input type="checkbox"/> Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(ii), my product is similar or identical in composition and labeling to: EPA Reg. No. 7969-289 Product Name Headline SC | |

Section - II

| | |
|--|--|
| <input type="checkbox"/> Amendment - Explain below. | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input checked="" type="checkbox"/> "Me Too" Application. |
| <input type="checkbox"/> Notification - Explain below. | <input type="checkbox"/> Other - Explain below. |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

This application falls under Category R301 (45) as it is a new product substantially similar in composition and use to a registered product, only product chemistry data are being submitted and the selective method of data support is being used to support product specific acute toxicity data requirements. The fee due is \$1897.00 and the decision timeline is 4 months. A receipt of PRIA pre-payment from pay.gov is included with this application. Should you have any questions, please contact me at (email) Mike@PyxisRC.com or (phone) 253-853-7369.

Section - III

| | | | | | |
|--|--|---|--|--|--|
| 1. Material This Product Will Be Packaged In: | | | | 2. Type of Container | |
| Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | <input type="checkbox"/> Metal | |
| | | | | <input checked="" type="checkbox"/> Plastic | |
| | | | | <input type="checkbox"/> Glass | |
| | | | | <input type="checkbox"/> Paper | |
| | | | | <input type="checkbox"/> Other (Specify) _____ | |
| * Certification must be submitted | | | | | |
| 3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container | | 4. Size(s) Retail Container 1, 2.5, 30, 265 gallons | | 5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product | |
| 6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled | | <input type="checkbox"/> Other _____ | | | |

Section - IV

| | | | |
|--|--|---|---|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.) | | | |
| Name Michael Kellogg | | Title Agent | |
| | | Telephone No. (Include Area Code) (253) 853-7369 | |
| Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. | | | 6. Date Application Received (Stamped) |
| 2. Signature | | 3. Title Agent | |
| 1. Typed Name Michael Kellogg | | 5. Date 2/23/16 | |

Willowood, LLC

8690 Lookingglass Road
Roseburg, Oregon 97471
541.679.9963 Office
541.679.4650 Fax

February 10, 2010

To Whom It May Concern:

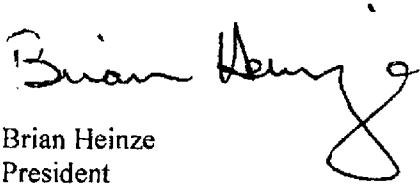
RE: Letter of Authorization

Dear Sir or Madam:

Please let this letter serve to confirm that Janelle Kay and Michael Kellogg of Pyxis Regulatory Consulting, Inc. are authorized to act as agent for Willowood, LLC (EPA Company Number 87290), before the U.S. Environmental Protection Agency, California Department of Pesticide Regulation Pesticide Registration Branch and other state governmental agencies in all matters regarding our pesticide registrations pursuant to the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 et seq. and state law.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Heinze", with a stylized flourish at the end.

Brian Heinze
President
Willowood, LLC

cc: Pyxis Regulatory Consulting, Inc.

Certification with Respect to Label Integrity

version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

| PROPOSED LABEL | | |
|--------------------|-----------------------|--|
| EPA Registration # | Date Submitted to EPA | Electronic file name |
| 87290-xx | February 23, 2016 | 087290-xxxxxx.20160223.Willowood Pyrac 2SC label.pdf |

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.


Signature


Date

Michael Kellogg

Name (typed)

Agent

Title

[Note to reviewer: Text in [brackets] indicates optional text]

GROUP 11 FUNGICIDE

WILLOWOOD PYRAC 2SC

FUNGICIDE

For use in disease control and plant health in the following crops: alfalfa, barley, citrus fruits, corn (all types), cotton, dried shelled peas and beans, edible-podded legume vegetables, grass grown for seed, mint, oats, oilseed crops, peanut, pecan, rye, sorghum, soybean, succulent shelled peas and beans, sugar beet, sugarcane, tuberous and corm vegetables (includes potato), and wheat and triticale.

ACTIVE INGREDIENT*:

Pyraclostrobin: (carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl] methoxy-, methyl ester) 23.3%

OTHER INGREDIENTS: 76.7%

TOTAL: 100.0%

*Equivalent to 2.08 pounds of pyraclostrobin per gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail).

| FIRST AID | |
|---|---|
| If swallowed | <ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Do not give any liquid to the person. <i>Have person sip glass of water if able to swallow</i>Do not induce vomiting unless told to by a poison control center or doctor.Do not give anything to an unconscious person. |
| If on skin or clothing | <ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15-20 minutes.Call a poison control center or doctor for treatment advice. |
| If in eyes | <ul style="list-style-type: none">Hold eyes open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.Call a poison control center or doctor for treatment advice. |
| If inhaled | <ul style="list-style-type: none">Move person to fresh air.If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth, if possible.Call a poison control center or doctor for further treatment advice. |
| HOT LINE NUMBER | |
| Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center (NPIC) at 1-800-858-7378 Mon. - Fri. 8:00 am to 12:00 pm Pacific Time. For emergencies, call the poison control center at 1-800-222-1222. | |

[See [inside] label booklet for [First Aid], [Precautionary Statements] and [Directions for Use including Storage and Disposal instructions.]]

EPA Reg. No. 87290-xx

EPA Est. No.

Manufactured for: *AG*
Willowood, LLC
1600 NW Garden Valley Blvd. #120
Roseburg, OR 97471

Net Contents:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: May be fatal if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. *Avoid contact of skin, eyes, or clothing. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Wear long sleeved shirt, long pants, socks, shoes, & waterproof gloves. Wear patch eyewear.*

PERSONAL PROTECTIVE EQUIPMENT (PPE)

~~Some materials that are chemically resistant to this product are listed below.~~

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants *
- Protective eyewear (goggles, face shield, or safety glasses) *
- Shoes plus socks *
- ~~Chemical-resistant gloves made of any waterproof material (such as nitrile, butyl, neoprene and/or barrier laminate).~~ *Waterproof Gloves.*
- ~~Chemical-resistant headgear for overhead exposure.~~
- ~~Chemical-resistant apron when cleaning equipment, mixing, and loading.~~

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product may contaminate water through drift of spray in wind. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or tribe, consult the Agency responsible for pesticide regulation.

PHYSICAL & CHEMICAL HAZARDS

Do not mix or allow to come in contact w/ oxidizing agents. Hazardous chemical reaction may occur.

AGRICULTURAL USE REQUIREMENTS ✓

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. ✓

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- ~~Long-sleeved shirt and long pants~~ *Coveralls*
- ~~Chemical-resistant gloves, made of any waterproof material (such as nitrile, butyl, neoprene, and/or barrier laminate)~~ *Waterproof gloves*
- Shoes plus socks
- Protective eyewear ~~(goggles, face shield, or safety glasses)~~

Product Information ✓

Willowood Pyrac 2SC, a suspension concentrate (SC), contains the active ingredient pyraclostrobin, a member of the strobilurin class of chemistry derived from a natural antifungal substance. Preventive applications optimize disease control, resulting in improved plant health. The increase in plant health comes from the combined effect of disease control (including fungal diseases listed in Crop-specific directions), improved growth efficiency and improved stress tolerance. Overall increased plant health may result in an improvement in crop growth and crop quality as well as increased crop yields.

To maximize disease control, apply Willowood Pyrac 2SC in a regularly scheduled protective spray program and use in a rotation program with other fungicides.

Because of its high specific activity, Willowood Pyrac 2SC has good residual activity against target fungi.

Willowood Pyrac 2SC is not for use in greenhouse or transplant production.

Mode of Action ✓

Pyraclostrobin, the active ingredient of Willowood Pyrac 2SC, belongs to the group of respiration inhibitors classified by the U.S. EPA and Canada PMRA as quinone outside inhibitors (QoI) or target site of action Group 11 fungicides.

Resistance Management ✓

Willowood Pyrac 2SC is effective against pathogens resistant to fungicides with modes of action different from those of QoI fungicides (target site Group 11), such as dicarboximides, sterol inhibitors, benzimidazoles, or phenylamides.

Fungal isolates resistant to Group 11 fungicides, such as pyraclostrobin, azoxystrobin, flunxastrobin, trifloxystrobin, and kresoxim-methyl, can eventually dominate the fungal population if Group 11 fungicides are used predominantly and repeatedly in the same field as successive years as the primary method of control for the targeted pathogen species. This can result in reduction of disease control by Willowood Pyrac 2SC or other Group 11 fungicides.

DO NOT exceed the maximum seasonal use rate or the total number of Willowood Pyrac 2SC applications per season and the maximum number of Willowood Pyrac 2SC applications stated in **Restrictions and Limitations – All Crops** and **Table 2. Willowood Pyrac 2SC Crop-Specific Requirements**. Follow the label instructions for use of Willowood Pyrac 2SC or other target site of action Group 11 fungicides that have a similar site of action on the same pathogens.

When using a Group 11 fungicide as a solo product, the number of applications should be no more than 1/3 of the total number of fungicide applications per season.

In programs applying or using tank mixes or pre-mixes of a Group 11 fungicide with a fungicide of another group, the number of Group 11 fungicide (QoI)-containing applications must not be more than ½ of the total number of fungicide applications per season. In programs applying or using Group 11 fungicides with both solo products and mixtures, the number of Group 11 fungicide (QoI)-containing applications must not be more than ½ of the total number of fungicide applications per season.

In fungicide alternation programs of Group 11 (QoI)-containing fungicides with non-Group 11 fungicides of different modes of action, the maximum number of sequential applications stated in **Restrictions and Limitations – All Crops** and **Table 2. Willowood Pyrac 2SC Crop-Specific Requirements** must be alternated with at least an equal number of applications of a non-Group 11-containing fungicide prior to using the Group 11 (QoI)-containing fungicide again. If two sequential applications of a Group 11 (QoI)-containing fungicide are made, follow this block of applications with 2 or more applications of a non-Group 11-containing fungicide prior to using the Group 11 (QoI)-containing fungicide again.

Resistance Management Advisory ✓

The following instructions may delay the development of fungicide resistance:

1. **Tank mixtures:** Use tank mixtures with effective fungicides from different target site of action groups that are registered/permited for the same use and that are effective against the pathogens of concern.

Use at least the minimum labeled rates of each fungicide in the tank mix.

2. **IPM** – Integrated Willowood Pyrac 2SC into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor and/or Willowood, LLC representative for additional IPM strategies established for your area. Willowood Pyrac 2SC can be used in agricultural extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
3. **Monitoring** – Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development. If a Group 11 target site fungicide, such as Willowood Pyrac 2SC, appears to be less effective against a pathogen that is previously controlled or suppressed, contact a Willowood, LLC representative, local extension specialist, or certified crop advisor for further investigation.

Application Instructions

Apply Willowood Pyrac 2SC rates as instructed in **Table 2. Crop-specific Requirements**. Apply Willowood Pyrac 2SC with ground sprayer, aerial equipment, or through sprinkler irrigation equipment. Check equipment frequently for calibration.

For containers 5 gallons or less, shake well prior to use. For containers greater than 5 gallons, recirculate prior to use. Consult your Willowood, LLC representative for additional information regarding agitation and recirculation.

Under low-level disease conditions, use minimum application rates. For severe or threatening disease conditions, use maximum application rates and shortened spray intervals.

Cleaning Spray Equipment

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used prior to Willowood Pyrac 2SC.

Ground Application

Apply Willowood Pyrac 2SC in sufficient water to ensure thorough coverage of foliage, blooms, and fruit for optimum disease control. Refer to **Additives and Tank Mixing Information** section for adjuvant or

crop oil restrictions for ground applications in corn. See **Table 2. Willowood Pyrac 2SC Crop-specific Requirements** for in-furrow instructions.

Aerial Application ✓

For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Unless otherwise specified in this label or in supplemental labeling, use no less than 5 gallons of spray solution per acre. For aerial application to citrus orchards, use no less than 10 gallons of spray solution per acre. Do not apply when conditions favor drift from target area.

Aerial Application to Alfalfa, Barley, Corn, Oats, Rye, Soybean, Wheat and Triticale

Aerial applications of Willowood Pyrac 2SC can be made to corn, soybean, wheat and triticale in water volumes of 1 or more gallons of spray solution per acre (gpa). Aerial applications of Willowood Pyrac 2SC can be made to alfalfa, barley, oats and rye in water volumes of 2 or more gallons of spray solution per acre (gpa). The use of a crop oil or adjuvant can be used to improve spray coverage (see **Additives and Tank Mixing Information** section). Refer to the adjuvant product label for specific use directions and restrictions.

For optimum results in high disease pressure, use a minimum spray volume of 4 gpa. Select spray nozzles, pumping pressure, and sprayer height to provide medium-to-fine spray droplets that penetrate throughout the crop canopy. Spray calibration must be conducted to confirm spray droplet sizes. Continue to monitor spray application (including weather conditions) to ensure proper droplet size and canopy penetration.

Spray volumes of 5 gallons or more per acre. For applications with spray volumes of 5 gallons or more per acre, an adjuvant can be used to improve spray coverage (see **Additives and Tank Mixing Information**). Refer to the adjuvant product label for specific use directions and restrictions.

Select spray nozzles, pumping pressure, and sprayer height to provide medium-to-fine spray droplets that penetrate throughout the crop canopy. Calibrate spray to confirm spray droplet sizes. Monitor spray application including weather conditions to ensure proper droplet size and canopy penetration.

Spray Drift Management ✓

Do not spray when conditions favor drift beyond area intended for application. Conditions that may contribute to drift include thermal inversion, wind speed and direction, spray nozzle/pressure combinations, spray droplet size, temperature/humidity, etc. Contact your state extension agent for spray drift prevention guidelines in your area. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers. Avoiding spray drift at the application site is the responsibility of the applicator.

Aerial Application Methods and Equipment ✓

The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply under circumstances where possible drift to unprotected persons, to food, forage, or other plantings that might be damaged, or crops thereof rendered unfit for sale, use or consumption can occur.

Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the fixed wingspan or 90% of the rotor blade diameter.

2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the aerial drift reduction advisory information.

Information on Droplet Size ✓

The most effective way to reduce drift potential is to apply large droplets. Use the largest droplet size consistent with acceptable efficacy. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see **Wind; Temperature and Humidity; and Temperature Inversions**).

Controlling Droplet Size:

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is recommended practice. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Wind ✓

Do not apply at wind speeds greater than 15 mph. Drift potential is lowest when wind speed does not exceed 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Avoid applications below 2 mph due to variable wind direction and high inversion potential. Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity ✓

Low humidity and high temperatures increase the evaporation of spray droplets and, therefore, the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures. When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions ✓

Applications must not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light, variable winds common during inversions.

Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas ✓

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., bodies of water or non-target crops) is minimal and when wind is blowing away from the sensitive areas.

Directions For Use Through Sprinkler Irrigation Systems ✓

Sprayer Preparation

Chemical tank and injector system must be thoroughly cleaned. Flush system with clean water.

Application Instructions

Apply Willowood Pyrac 2SC at rates and timings specified in this label.

Sprinkler Irrigation Applications Use Precautions

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.
- Add this product to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. In continuous moving systems, inject this product/water mixture continuously, applying the labeled rate per acre for that crop. Do not exceed ½ inch (13, 577 gallons) per acre. In stationary or non-continuous moving systems, inject the product/water mixture in the last 15 to 30 minutes of each set allowing sufficient time for all of the required pesticide to be applied by all the sprinkler heads and applying the labeled rate per acre for that crop. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control. Maintain agitation during the entire application period.
- Contact state extension service specialists, equipment manufacturers, or other experts for calibration questions.
- The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide-injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation, or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

Specific Instructions for Public Water ✓

1. Public water systems means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Additives and Tank Mixing Information ✓

Willowood Pyrac 2SC fungicide can be tank mixed with most recommended fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants, and additives as specified in **Table 2. Willowood Pyrac 2SC Crop-specific Requirements.**

Under some conditions, the use of additives or adjuvants may improve the performance of Willowood Pyrac 2SC. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance. Physical incompatibility, reduced disease control, or crop injury can result from mixing Willowood Pyrac 2SC with other products. Therefore, before using any tank mix (fungicides, insecticides, herbicides, liquid fertilizers, biological control products, adjuvants and additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application. Follow the most restrictive label.

Adjuvant or Crop Oil Use Limitations on Corn (ground and aerial applications) ✓

Adjuvant crop damage can occur when an adjuvant or crop oil is used after the V8 stage and before the VT stage (the VT stage is defined as when the tassel's last branch is completely visible outside the whorl). If an adjuvant or crop oil is used after the V8 stage and before the VT stage, the grower and user are responsible for contacting the adjuvant source (adjuvant distributor, retailer, or manufacturer) for advice and confirmation that the adjuvant has been tested and proven to be safe for application from V8 to VT corn stage. Refer to adjuvant and/or crop oil labels for specific use directions and restrictions. Always follow the most restrictive label.

Another fungicide or an insecticide may be included in the tank mix if needed and labeled for use on corn. Refer to the tank mix pesticide product labels for specific use directions and restrictions. Always follow the most restrictive label.

Mixing Order ✓

1. **Water** – Agitate a thoroughly clean sprayer tank $\frac{3}{4}$ full of clean water.
2. **Agitation** – Maintain constant agitation throughout mixing and application.

3. **Inductor** – If an inductor is used, rinse it thoroughly after each component has been added.
4. **Products in PVA bags** – Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
5. **Water-dispersible products** (such as Willowood Pyrac 2SC, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) – **For containers 5 gallons or less, shake well prior to use. For containers greater than 5 gallons, recirculate prior to use.** Consult your Willowood, LLC representative for additional information regarding agitation and recirculation.
6. **Water-soluble products**
7. **Emulsifiable concentrates** (such as oil concentrates when applicable)
8. **Water-soluble additives** (such as ammonium sulfate [AMS] or urea ammonium nitrate [UAN] when applicable)
9. **Remaining quantity of water**

Make sure each component is thoroughly mixed and suspended before adding tank mix partners. Maintain constant agitation during application. See **Table 2. Willowood Pyrac 2SC Crop-specific Requirements** for more details.

Restrictions and Limitations – All Crops

- Do not exceed the maximum product rate (fl ozs/A) per year (season), the maximum rate per application, or the total number of applications of Willowood Pyrac 2SC per year (season) as stated in **Table 1. Willowood Pyrac 2SC Restrictions and Limitations Overview** and **Table 2. Willowood Pyrac 2SC Crop-specific Requirements**. Preharvest interval (PHI) restrictions are also included in these tables.
- Do not use Willowood Pyrac 2SC in greenhouse or transplant production.
- **For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).**

Crop Rotation Restriction

Crops listed on the Willowood Pyrac 2SC, Cabrio® EG fungicide and Pristine® fungicide labels may be planted immediately following the last application. For all other crops, do not plant sooner than 14 days after the last application.

Ground Application Directed or Banded Sprays

The application rates shown in the following tables pertain to both aerial and ground (broadcast) methods of application. Willowood Pyrac 2SC may also be applied as a directed or banded spray over the rows or plant beds with alleys or row middles left unsprayed. For such uses, reduce the Willowood Pyrac 2SC rate in proportion to the area actually sprayed. This adjustment is necessary to prevent applying the product at use rates higher than permitted on this label.

Use the following formula to determine the broadcast equivalent rate for directed or banded sprays:

Sprayed bed width + unsprayed row middles = total row width

$$\frac{\text{Sprayed bed width in inches}}{\text{Total row width in inches}} \times \frac{\text{broadcast rate}}{\text{treated acre}} = \frac{\text{band rate}}{\text{field acre}}$$

EXAMPLE: Directed spray application to 45-inch plant beds separated by 15-inch unsprayed row-middles at a 12 fl ozs/A broadcast rate:

45 inches sprayed bed width + 15 inches unsprayed row middles = 60 inches total row width

$$\frac{45 \text{ inches sprayed bed width}}{60 \text{ inches total row width}} \times \frac{12 \text{ fl ozs Willowood Pyrac 2SC}}{\text{treated acre}} = \frac{9 \text{ fl ozs Willowood Pyrac 2SC}}{\text{field acre}}$$

Table 1. Willowood Pyrac 2SC Restrictions and Limitations Overview*

| Crop/Crop Group** | Minimum Time from Application to Harvest (PHI)(days) | Maximum Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (Season) (fl ozs/A) (lbs ai pyraclostrobin) |
|--|--|---|--|---|
| Alfalfa | 14 | 9 | 3 | 27**** (0.45) |
| Barley | See Table 2. Willowood Pyrac 2SC Crop-specific Requirements | 9 | 2 | 18 (0.29) |
| Citrus Fruits Group***** | 0 | 15 | 2 | 54 (0.88) |
| Corn*** (all types) | 7 | 12 | 2 | 72 (1.18) |
| Cotton*** | 30 | 12 | 2 | 36 (0.58) |
| Dried Shelled Peas and Beans*** (except soybeans) | 21 | 9 | 2 | 18 (0.29) |
| Edible-podded Legume Vegetables | 7 | 9 | 2 | 18 (0.29) |
| Grass Grown for Seed | 14 | 12 | 2 | 24 (0.39) |
| Mint | 14 | 12 | 2 | 48 (0.78) |
| Oats | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) | 9 | 2 | 18 (0.29) |
| Oilseed Crops*** | 21 | 12 | 2 | 24 (0.39) |
| Peanut*** | 14 | 15 | 2 | 45 (0.73) |
| Pecan | 14 | 7 | 2 | 28 (0.46) |
| Rye | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55) | 9 | 2 | 18 (0.29) |
| Sorghum | Apply no later than 25% flowering | 12 | 1 | 12 (0.20) |
| Soybean*** | 21 | 12 | 2 | 24 (0.39) |
| Succulent Shelled Peas and Beans | 7 | 9 | 2 | 18 (0.29) |
| Sugar Beet*** | 7 | 12 | 2 | 48 |

| Crop/Crop Group** | Minimum Time from Application to Harvest (PHI)(days) | Maximum Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Year (Season) (fl ozs/A) (lbs ai pyraclostrobin) | |
|---|--|---|--|--|---|
| (roots and tops) | | | | (0.78) | ✓ |
| Sugarcane | 14 | 12 | 2 | 48 (0.78) | ✓ |
| Tuberous Corm Vegetables Subgroup*** (includes potato) | 3 | 12 | 1 | 72 (1.18) | ✓ |
| Wheat and Triticale | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) | 9 | 2 | 18 (0.29) | ✓ |

*See Table 2. Willowood Pyrac 2SC Crop-specific Requirements for complete directions and exceptions.

**For a complete list of crops within a crop group, see Table 2. Willowood Pyrac 2SC Crop-specific Requirements.

***The maximum product rate per season includes the combination in-furrow and foliar uses.

****Do not apply more than 27 fl ozs/A (0.45 lb ai/acre) of Willowood Pyrac 2SC in alfalfa per year (season). ✓

*****Maximum product rate per acre per application may vary for citrus fruits depending on target disease. Refer to Table 2. Willowood Pyrac 2SC Crop-specific Requirements, Citrus Fruits for maximum rates per application by target disease.

Aerial application is permitted for all labeled crops. For aerial application in New York State, do not apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Table 2. Willowood Pyrac 2SC Crop-specific Requirements

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) | |
|---------|---|---|--|---|---|---|
| Alfalfa | Anthracnose <i>Colletotrichum trifolii</i> Common leaf spot <i>Pseudopeziza medicaginis</i> Downy mildew <i>Peronospora trifoliorum</i> Leaf spot <i>Leptosphaerulina briosiani</i> Powdery mildew <i>Erysiphe pisi</i> Rhizoctonia blight/black patch <i>Rhizoctonia</i> spp. Rust <i>Uromyces</i> spp. | 6 to 9 | 3 | 27 (0.45 lb ai/acre) | 14 | ✓ |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|---|---|
| | Spring black stem and leaf spot <i>Phoma medicaginis</i> Stagnospora leaf spot <i>Stagnospora melilot</i> Stemphyllium leaf spot <i>Stemphyllium</i> spp. Summer black stem and leaf spot <i>Cercospora medicaginis</i> Yellow leaf blotch <i>Leptotrichila medicaginis</i> | | | | |

Application Directions: For optimal disease control, begin Willowood Pyrac 2SC applications prior to disease development.

Resistance Management. Do not make more than three (3) Willowood Pyrac 2SC applications per year (season).

Repeat applications on a 14 to 21 day interval if conditions are conducive for disease development. Do not make more than two (2) Willowood Pyrac 2SC applications per cutting or three (3) Willowood Pyrac 2SC applications per year. Use the higher rate and shorter interval when disease pressure is high.

*Do not apply more than 27 fl ozs/A (0.45 lb ai/acre) of Willowood Pyrac 2SC in alfalfa per year (season).

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|---|--|--|---|
| Barley | Black point Kernal blight or Head mold <i>Cochliobolus sativus</i> , <i>Alternaria</i> spp. Leaf rust <i>Puccinia hordei</i> , <i>P. recondite</i> Net blotch <i>Pyrenophora teres</i> Powdery mildew <i>Erysiphe graminis f.</i> | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55); 14 days in selected states (see map). |

| | | | | | |
|--|---|--|--|--|--|
| | <i>sp., hordei</i> Scald <i>Rhynchosporium secalis</i> Septoria leaf and glume blotch <i>Septoria spp.</i> , <i>Stagonospora spp.</i> Spot Blotch <i>Cochliobolus sativus</i> Stem Rust <i>Puccinia graminis f. sp., tritici</i> Stripe rust <i>Puccinia striiformis</i> Tan Spot Yellow leaf spot <i>Pyrenophora trichostoma</i> | | | | |
|--|---|--|--|--|--|

Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Do not harvest barley hay or feed green-chopped barley within 14 days of last application.

*For early season control of net blotch, Septoria leaf and glume blotch, spot blotch, and tan spot when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

Barley can be harvested 14 days after the last application in the following states: AZ (north of I-10), CO, ID, MT (west of Rt 87/I-15), NV, NM, OR, TX (west of Rt 283/377), UT, WA, and WY (west of I-25/I-90), as shown in the 14-Day PHI Use Area for Barley map.

14-Day PHI Use Area for Barley



Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|----------------------------|---|---|--|--|---|
| Citrus Fruits Group | Greasy spot <i>Mycosphaerella citri</i> | 9 to 12 | 2 | 54 (0.88 lb ai/acre) | 0 |
| Australian desert lime | Scab <i>Elsinoe</i> spp. | 12 to 15 | ✓ | | |
| Australian finger lime | Alternaria brown spot <i>Alternaria citria</i> | | | | |
| Australian round lime | Anthracnose <i>Colletotrichum acutatum</i> , <i>C. gloeosporioides</i> | | | | |
| Brown River finger lime | | | | | |
| Calamondin | Black spot <i>Guignardia citricarpa</i> | | | | |
| Citron | | | | | |
| Citrus hybrids | Melanose <i>Diaporthe citri</i> | | | | |
| Chironja | | | | | |
| Grapefruit | Post bloom fruit drop <i>Colletotrichum</i> | | | | |
| Japanese | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|-----------------|---|--|--|---|
| summer grapefruit Kumquat Lemon Lime Mediterranean mandarin Mount white lime New guinea wild lime Orange, sour Orange, sweet Pummelo Russell River lime Satsuma mandarin Sweet lime Tachibana orange Tahiti lime Tangelo Tangerine (mandarin) Tangor Trifoliate orange Uniq fruit Cultivars, varieties and/or hybrids of these | <i>acutatum</i> | | | | |
| <p>Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 10- to 21-day interval.</p> <p>Use the higher rate when disease pressure is high.</p> <p>For control of disease other than greasy spot, integrate 1 to 2 Willowood Pyrac 2SC applications early in the spray program. For greasy spot control, integrate 1 to 2 Willowood Pyrac 2SC applications into the fungicide program during the mid- to late-season.</p> <p>For aerial application to citrus orchards, use no less than 10 gallons of spray solution per acre.</p> | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|----------------|---|--|--|---|
| <p>No livestock feeding restrictions.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.88 lb ai pyraclostrobin (54 fl ozs of Willowood Pyrac 2SC) per acre per season.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|---|---|
| Corn Field corn Popcorn Sweet corn Seed production corn | Anthracnose** <i>Colletotrichum graminicola</i> | 6 to 12 | 2 | 72 (1.18 lbs ai/acre) | 7 |
| | Eyespot <i>Kabatiella zeae</i> | | | | |
| | Gray leaf spot <i>Cercospora zeamaydis</i> | | | | |
| | Northern corn leaf blight** <i>Exserohilum turcicum</i> | | | | |
| | Northern corn leaf spot** <i>Cochliobolus carbonum</i> | | | | |
| | Physoderma brown spot** <i>Physoderma maydis</i> | | | | |
| | Rust, common <i>Puccinia sorghi</i> | | | | |
| | Rust, Southern <i>Puccinia polyspora</i> | | | | |
| | Southern corn leaf blight** <i>Bipolaris maydis</i> | | | | |
| | Yellow leaf blight** <i>Phyllosticta maydis</i> | | | | |

Application Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high. Under high disease pressure for Northern corn leaf blight and Southern corn leaf blight, apply 9 to 12 fl ozs per acre. ✓

Willowood Pyrac 2SC can be used with adjuvants in corn. See **Additives and Tank Mixing Information** and **Mixing Order** section for more details.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per season. ✓

In field corn, do not make more than two (2) Willowood Pyrac 2SC applications per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. If more than two (2) Willowood Pyrac 2SC applications are made in a multiple spray program, alternate each subsequent Willowood Pyrac 2SC application with at least one (1) application of a non-Group 11 fungicide.

*The maximum product rate per season includes the combination of infurrow and foliar uses.

**The use rate in California is 9 to 12 fl ozs per acre. ✓

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Corn | | | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre. ✓

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action. ✓

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC. *time? per what?*

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.
 For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.
 For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.
 For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.
 For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|---|--|---|---|
| Cotton | <p>Alternaria leaf spot, boll rot <i>Alternaria</i> spp.</p> <p>Anthracnose, boll rot <i>Glomerella</i> spp.</p> <p>Ascochyta blight, boll rot <i>Ascochyta</i> spp.</p> <p>Cercospora blight and leaf spot <i>Cercospora</i> spp.</p> <p>Diplodia boll rot <i>Diplodia</i> spp.</p> <p>Hard lock, boll rot <i>Fusarium</i> spp.</p> <p>Phoma blight, boll rot <i>Phoma</i> spp.</p> <p>Rust <i>Puccinia</i> spp., <i>Phytophthora</i> spp.</p> <p>Stemphyllium leaf spot <i>Stemphyllium</i> spp.</p> | 6 to 12 | 2 | 36 (0.58 lb ai/acre) | 30 |

Applications Directions. For foliar and boll rot disease control, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high. For seedling disease control, see in-furrow application instructions following.

Willowood Pyrac 2SC can be used with adjuvants in cotton. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

No livestock grazing or feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.58 lb ai pyraclostrobin (36 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per season includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Cotton | | | | | | | | | |
|---|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| <p>Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an infurrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.</p> <p>When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.</p> <p>Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC. <i>pn?</i></p> <p>¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet. For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet. For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet. For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet. For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.</p> | | | | | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|---|---|
| Dried Shelled Peas and Beans (except soybeans) Broad bean Chickpea Guar Lablab bean Lentil Pigeon pea Lupinus spp. Grain lupin Sweet lupin White lupin Phaseolus spp. Field bean Kidney bean Lima bean Navy bean Pink bean Pinto bean Tepary bean Vigna spp. Adzuki bean Black-eyed pea Catjang Cowpea Crowder pea Moth bean Mung bean Rice bean Southern pea Urd bean Pisum spp. Field pea | Anthracnose <i>Colletotrichum</i> spp. Alternaria leaf and pod spot <i>Alternaria</i> spp. Ascochyta blight <i>Phoma exigua</i> , <i>Ascochyta</i> spp. Asian soybean rust <i>Phakopsora pachyrhizi</i> Cercospora leaf spot <i>Cercospora</i> spp. Downy mildew <i>Phytophthora nicotianae</i> Mycosphaerella blight <i>Mycosphaerella</i> spp. Powdery mildew <i>Erysiphe polygoni</i> Rust <i>Uromyces appendiculatus</i> | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 21 |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in dried shelled peas and beans (except soybean). See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per season.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> | | | | | |

*The maximum product rate per season includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Dried Shelled Beans* (except soybeans) | | | | | | | | | |
|---|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | see footnote ¹ | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 9.0 | 8.5 | 8.1 |

Applications Directions. Use 0.1 to 0.6 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 9 fl ozs per acre of Willowood Pyrac 2SC.

*Adzuki bean, black-eyed pea, broad bean, catjang, chickpea, crowder pea, field bean, grain lupin, guar, kidney bean, lablab bean, lima bean, moth bean, mung bean, navy bean, pink bean, pinto bean, rice bean, Southern pea, sweet lupin, tepary bean, urd bean, and white lupin

¹For 30- to 34-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.
 For 20- to 22-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.
 For 15-inch rows, use a maximum of 0.2 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|--|---|
| Edible-podded Legume Vegetables | Alternaria leaf and pod spot <i>Alternaria</i> spp. | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 7 |
| Jack bean | Anthracnose | | | | |
| Pigeon pea | <i>Colletotrichum</i> spp. | | | | |
| Soybean (immature seed) | Ascochyta blight | | | | |
| Sword bean | <i>Phoma exigua</i> , <i>Ascochyta</i> spp. | | | | |
| Phaseolus spp. | Asian soybean rust | | | | |
| Runner bean | <i>Phakopsora pachyrhizi</i> | | | | |
| Snap bean | | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|---|---|--|--|---|
| Wax bean Vigna spp. Asparagus bean Chinese longbean Moth bean Yardlong bean Pisum spp. Dwarf pea Edible-podded pea Snowpea Sugar snap pea | Cercospora leaf spot <i>Cercospora</i> spp. Downy mildew <i>Phytophthora nicotianae</i> Mycosphaerella blight <i>Mycosphaerella</i> spp. Powdery mildew <i>Erysiphe polygoni</i> Rust <i>Uromyces appendiculatus</i> | | | | |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in edible-podded legume vegetables. See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per season.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|--|---|--|--|---|
| Grass Grown for Seed | Rust <i>Puccinia recondita</i> , <i>P. graminis</i> <u>Suppression Only:</u> Powdery mildew <i>Erysiphe graminis</i> | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 14 |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. Apply again 14 to 21 days later.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Do not graze or feed forage or hay to livestock within 27 days of last application.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai</p> | | | | | |

pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|---|
| Mint | Leaf spot <i>Ramularia</i> spp., <i>Alternaria</i> spp., <i>Phoma</i> spp. Powdery mildew <i>Erysiphe</i> spp. Rust <i>Puccinia</i> spp. | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 14 |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Willowood Pyrac 2SC can be used with adjuvants in mint. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Resistance Management. To limit development of resistance, do not apply more than 0.78 lb ai pyraclostrobin (48 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|--|
| Oats | Crown rust <i>Puccinia coronata</i> Helminthosporium leaf spot <i>Drechslera avenae</i> Leaf blotch <i>Pyrenophora avenae</i> Leaf rust <i>Puccinia</i> spp. Septoria blotch and stem rot | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|---|---|--|--|---|
| | <i>Septoria avenae</i> , <i>Phaeosphaeria avenaria</i> , <i>Stagnospora avenae</i> Spot blotch <i>Bipolaris</i> spp. Stem rust <i>Puccinia graminis</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results. ✓

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing the disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source. ✓

Do not harvest oat hay or feed green-chopped oats within 14 days of last application. ✓

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per season. ✓

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. ✓

*For early season control of leaf blotch, Septoria blotch and stem rot, and spot blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California. ✓

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------------|--|---|--|---|---|
| Oilseed Crops | Pasmo | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 21 |
| Flax seed | <i>Septoria linicola</i> | | | | |
| Rapeseed | Blackleg <i>Leptosphaeria maculans</i> | | | | |
| | Blackspot <i>Alternaria</i> spp. | | | | |
| Sunflower | Alternaria leaf spot <i>Alternaria</i> spp. | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season* (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|---|---|
| | Cercospora leaf spot <i>Cercospora helianthi</i> Downy mildew <i>Plasmopara halstedii</i> Powdery mildew <i>Erysiphe cichoracearum</i> Rust <i>Puccinia helianthi</i> <i>Uromyces</i> spp. Septoria leaf spot <i>Septoria</i> spp. White rust <i>Albugo tragopogonis</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Flax seed. Apply Willowood Pyrac 2SC at mid-flowering (7 to 10 days after flower initiation). Make a second application 7 to 10 days later if disease persists or if weather conditions are favorable for disease development.

Rapeseed. For control of blackleg, apply Willowood Pyrac 2SC at 2- to 4-leaf stage. **For control of blackspot,** apply Willowood Pyrac 2SC at early pod development. A second application 7 to 10 days later can be made if disease persists or if weather conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Willowood Pyrac 2SC can be used with adjuvants in oilseed crops. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per season for **sunflower** includes the combination of infurrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------------|------------------------|---|--|--|---|
| Oilseed Crops | <i>Alternaria</i> spp. | 6 to 12 | 2 | 24 | 21 |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|----------------------|---|--|--|---|
| <i>(continued)</i> Borage Calendula Castor oil plant Chinese tallowtree Crambe Cuphea Echium Euphorbia Evening primrose Gold of pleasure (Camelina) Hare's ear mustard Jojoba Lesquerella Lunaria Meadowfoam Milkweed Mustard seed Niger seed Oil radish Poppy seed Rose hip Safflower Sesame Stokes aster Sweet rocket Tallowwood Teal oil plant Vernonia | <i>Septoria</i> spp. | | | <i>(0.39 lb ai/acre)</i> | |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in oilseed crops. See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>No livestock feeding restrictions.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per season.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a non-Group 11 fungicide with a different mode of action.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Sunflower | |
|--|-------------------------------------|
| Rate per | Willowood Pyrac 2SC Rate (fl ozs/A) |

| 1000 row feet (fl oz product) | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
|----------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------|-----------------|-----------------|
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|--|--|---|---|
| Peanut | Early leaf spot <i>Cercospora arachidicola</i> | 6 to 15 (see details below) | 2 | 45 (0.73 lbs ai/acre) | 14 |
| | Late leaf spot <i>Cercosporidium personatum</i> | | | | |
| | Pepperspot <i>Leptosphaerulina crassiasca</i> | | | | |
| | Rust <i>Puccinia arachidis</i> | | | | |
| | Web blotch <i>Phoma arachidicola</i> | | | | |
| | Rhizoctonia limb rot, Peg rot, Pod rot <i>Rhizoctonia solani</i> | 9 to 15 | | | |
| | Sclerotium rot, Southern stem rot, | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | Southern blight, and White mold <i>Sclerotium rolfsii</i> | | | | |
| | Suppression Only: Sclerotinia blight <i>Sclerotinia minor</i> | | | | |
| | Cylindrocladium black rot <i>Cylindrocladium crotalariae</i> | 12 to 15 | | | |

Applications Directions. For control of early and late leaf spot, pepperspot, rust and web blotch, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development. When using a 14-day spray interval, apply Willowood Pyrac 2SC at 6 to 12 fluid ounces per acre. At spray intervals between 14 and 21 days, apply Willowood Pyrac 2SC at 9 to 15 fluid ounces per acre.

For control of Rhizoctonia and Sclerotium, begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14- to 28-day interval. For intervals greater than 14 days, use 15 fluid ounces per acre.

Use the higher rate and/or shorter interval when disease pressure is high or in fields with a history of disease.

Willowood Pyrac 2SC can be used with adjuvants in peanut; however, mixes with silicone-containing adjuvants may cause crop injury under certain conditions. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

Peanut meal can be fed. Do not graze or harvest for forage use.

Resistance Management. To limit development of resistance, do not apply more than 0.73 lb ai pyraclostrobin (45 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. In spray programs where four (4) or less fungicide applications are made in a season, Willowood Pyrac 2SC should be alternated with at least one (1) application of a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per season includes the combination of in-furrow and foliar uses.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for Infurrow Use to Aid in the Control of Soilborne Rhizoctonia in Peanut | | | | | | | | | |
|--|-------------------------------------|---------------------------|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |

| | | | | | | | | | |
|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------|------|------|
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC for peanut in-furrow use.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|-------|--|---|--|--|---|
| Pecan | Pecan scab <i>Cladosporium caryigenum</i> | 6 to 7 | 2 | 28 (0.46 lb ai/acre) | 14 |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14-day interval. For optimum performance, apply Willowood Pyrac 2SC early in the spray program (e.g. prepollination and first cover).

Resistance Management. To limit development of resistance, do not apply more than 0.46 lb ai pyraclostrobin (28 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--------|--|---|--|--|---|
| Potato | Black dot <i>Colletotrichum coccodes</i> | 6 to 9 | 1 | 72 (1.18 lbs ai/acre) | 3 |
| | Early blight <i>Alternaria solani</i> | | | | |
| | Late blight <i>Phytophthora infestans</i> | 6 to 12 | | | |
| | Powdery mildew <i>Erysiphe</i> spp. | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | <i>Leveillula taurica</i> Suppression Only: White mold <i>Sclerotinia sclerotiorum</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications at 7- to 14-day intervals prior to disease development. The low rate and longer interval can be used early season prior to the observance of symptoms and when disease pressure is low. **For control of late blight**, follow Willowood Pyrac 2SC application with a labeled non-Group 11 fungicide with a different mode of action 5 to 7 days later.

Use the higher rates and/or shorter intervals once disease has been confirmed in your area or weather conditions are favorable to disease development.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than one (1) Willowood Pyrac 2SC application before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*The maximum product rate per season includes the combination of in-furrow and foliar uses.

In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Potatoes

Use 0.4 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. For applications on 32-inch or 34-inch rows, the maximum application rate is 0.73 fl oz/1000 row feet. Apply at planting as an in-furrow spray by directing spray pattern to uniformly cover seed pieces and surrounding soil. The spray pattern must be a 4- to 8-inch band applied to the seed piece prior to being covered with soil.

When Rhizoctonia disease pressure conditions are expected to be severe or if the field has a history of Rhizoctonia infestations, use Willowood Pyrac 2SC at 0.6 to 0.8 fl oz per 1000 row feet and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

Use a minimum volume of application of 5 gallons of water per acre.

| Willowood Pyrac 2SC Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | |
|--|-------------------------------------|---------------------------|--------------|--------------|--------------|
| | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.4 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.6 | 10.0 | 9.6 | 9.0 | 8.6 | 8.1 |
| 0.8 | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

¹For 32-inch or 34-inch rows, use a maximum of 0.73 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|----------------|---|--|--|---|
|------|----------------|---|--|--|---|

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|--|
| Rye | Leaf rust <i>Puccinia recondita</i> Leaf spot <i>Pyrenophora</i> spp. Powdery mildew <i>Erysiphe graminis</i> Septoria leaf and glume blotch <i>Septoria</i> spp., <i>Stagonospora</i> spp. Stem rust <i>Puccinia graminis</i> Stripe rust <i>Puccinia striiformis</i> | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than 50% head emergence (Feekes 10.3, Zadok's 55) |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reduction in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*For early season control of leaf spot and Septoria leaf and glume blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------|--------------------------------------|---|--|--|---|
| Sorghum | Anthracnose <i>Colletotrichum</i> | 6 to 12 | 1 | 12 (0.20 lb ai/acre) | Apply no later than |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | <i>graminocola</i> Gray leaf spot <i>Cercospora</i> spp. Northern leaf blight <i>Excerohilum turcicum</i> Rust <i>Puccinia</i> spp. Southern leaf blight <i>Bipolaris</i> spp. | | | | 25% flowering |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development.

Use the higher rate when disease pressure is high.

Under high disease pressure for Northern leaf blight and Southern leaf blight, apply 9 to 12 fl ozs per acre.

Resistance Management. To limit development of resistance, do not apply more than 0.20 lb ai pyraclostrobin (12 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than one (1) Willowood Pyrac 2SC application per season. If additional fungicide applications are needed, use a labeled non-Group 11 fungicide with a different mode of action.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------|---|---|--|--|---|
| Soybean | Alternaria leaf spot <i>Alternaria</i> spp. Anthracnose <i>Colletotrichum truncatum</i> Asian soybean rust <i>Phakopsora pachyrhizi</i> Brown spot <i>Septoria glycines</i> Cercospora blight <i>Cercospora kikuchii</i> Frogeye leaf spot <i>Cercospora sojina</i> Pod and stem blight | 6 to 12 | 2 | 24 (0.39 lb ai/acre) | 21 |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|--|---|--|--|---|
| | <i>Diaporthe phaseolorum</i> Rhizoctonia aerial blight <i>Rhizoctonia solani</i> Suppression Only: Southern blight <i>Sclerotium rolfsii</i> | 12 | | | |
| <p>Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.</p> <p>Use the higher rate and shorter interval when disease pressure is high.</p> <p>For control of soybean rust, apply Willowood Pyrac 2SC prior to infection.</p> <p>Willowood Pyrac 2SC can be used with adjuvants in soybeans. See Additives and Tank Mixing Information and Mixing Order sections for more details.</p> <p>Soybean forage can be fed no sooner than 14 days after last application.</p> <p>Soybean hay can be fed no sooner than 21 days after last treatment.</p> <p>Resistance Management. To limit development of resistance, do not apply more than 0.39 lb ai pyraclostrobin (24 fl ozs of Willowood Pyrac 2SC) per acre per season.</p> <p>Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.</p> <p>*The maximum product rate per season includes the combination of in-furrow and foliar uses.</p> | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Soybean | | | | | | | | | |
|--|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------|--------------|--------------|
| Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch rows | 20-inch rows | 22-inch rows | 30-inch rows | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| <p>Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.</p> <p>When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl</p> | | | | | | | | | |

ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC fungicide Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|---|---|--|--|---|
| Succulent Shelled Peas and Beans | Alternaria leaf and pod spot <i>Alternaria</i> spp. | 6 to 9 | 2 | 18 (0.29 lb ai/acre) | 7 |
| Pigeon pea | Anthrachnose <i>Colletotrichum</i> spp. | | | | |
| <i>Vigna</i> spp. | | | | | |
| Black-eyed pea | Ascochyta blight | | | | |
| Cowpea | <i>Phoma exigua</i> | | | | |
| Southern pea | <i>Ascochyta</i> spp. | | | | |
| <i>Pisum</i> spp. | | | | | |
| Broad bean | Asian soybean rust <i>Phakopsora pachyrhizi</i> | | | | |
| English pea | | | | | |
| Garden pea | | | | | |
| Green pea | Cercospora leaf spot <i>Cercospora</i> spp. | | | | |
| Phaseolus spp. | | | | | |
| Lima bean, green | Downy mildew <i>Phytophthora nicotianae</i> , <i>P. phaseoli</i> | | | | |
| | Mycosphaerella blight <i>Mycosphaerella</i> spp. | | | | |
| | Powdery mildew <i>Erysiphe polygoni</i> | | | | |
| | Rust <i>Uromyces appendiculatus</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 7- to 14-day interval if conditions are favorable for disease development.

Use the higher rate and shorter interval when disease pressure is high.

Bean forage, bean hay, pea vines, and pea hay may be fed no sooner than 14 days after last application.

Willowood Pyrac 2SC can be used with adjuvants in succulent shelled peas and beans. See **Additives and Tank Mixing Information** and **Mixing Order** sections for more details.

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|----------------|---|--|--|---|
| Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs of Willowood Pyrac 2SC) per acre per season. Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action. | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|---|---|--|--|---|
| Sugar Beet (roots and tops) | Cercospora leaf spot <i>Cercospora beticola</i> Powdery mildew <i>Erysiphe betae</i> | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 7 |
| Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development and continue on a 14-day interval. Use the higher rate when disease pressure is high. Willowood Pyrac 2SC applications will aid in the control of Rhizoctonia stem canker and crown rot. In sugar beet, Willowood Pyrac 2SC can be combined with low rates of crop oil concentrate (COC), methylated seed oil (MSO), and nonionic surfactant (NIS) adjuvants. Do not use silicone-containing adjuvants. Some combinations and rates may result in temporary crop injury. Willowood Pyrac 2SC Tank Mixes. Willowood Pyrac 2SC can be tank mixed with herbicides such as Poast® herbicide, Select® herbicide (or Willowood Clethodim 2EC), Assure® II herbicide or Prism® herbicide for postemergence control of grasses in sugar beet. Do not use silicone-based adjuvants in such combinations. Willowood Pyrac 2SC tank mix combinations can include COC or MSO; however, crop injury may result. The level of injury tends to increase with increasing rates of COC or MSO. See Additives and Tank Mixing Information and Mixing Order sections for more details. No livestock feeding restrictions. Resistance Management. To limit development of resistance, do not apply more than 0.78 lb ai pyraclostrobin (48 fl ozs of Willowood Pyrac 2SC) per acre per season. Do not make more than one (1) Willowood Pyrac 2SC application before the 4-leaf stage of plant growth. After the 4-leaf stage of plant growth, do not make more than (1) Willowood Pyrac 2SC application before alternating to a labeled non-Group 11 fungicide with a different mode of action. *The maximum product rate per season includes the combination of in-furrow and foliar uses. | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Instructions for In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Sugar Beet | | | | | | | | | |
|---|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rate per 1000 row feet | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | | | | | |
| | 15-inch | 20-inch | 22-inch | 30-inch | 32-inch | 34-inch | 36-inch | 38-inch | 40-inch |

| (fl oz product) | rows | rows | rows | rows | rows | rows | rows | rows | rows |
|-----------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------|------|------|
| 0.1 | 3.5 | | | | | | | | |
| 0.2 | 7.0 | 5.2 | 4.7 | 3.5 | 3.3 | 3.2 | 3.0 | | |
| 0.3 | 10.5 | 7.8 | 7.1 | 5.2 | 5.0 | 4.8 | 4.5 | 4.3 | 4.0 |
| 0.4 | see footnote ¹ | 10.4 | 9.5 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.5 | see footnote ¹ | see footnote ¹ | 11.8 | 8.7 | 8.4 | 8.0 | 7.5 | 7.1 | 6.7 |
| 0.6 | see footnote ¹ | see footnote ¹ | see footnote ¹ | 10.4 | 10.0 | 9.6 | 9.0 | 8.5 | 8.1 |
| 0.7 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 11.7 | 11.2 | 10.5 | 10.0 | 9.4 |
| 0.8 | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |

Applications Directions. Use 0.1 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. Apply at planting as an in-furrow application by directing the spray into the furrow before seed is covered. Use a minimum application volume of 2.5 gallons of water per acre.

When Rhizoctonia seedling disease pressure conditions are expected to be severe or if the field has a history of seedling diseases, use Willowood Pyrac 2SC at a product rate per acre equivalent to 9 to 12 fl ozs and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

¹For 32- to 34-inch rows, use a maximum of 0.7 fl oz per 1000 row feet.

For 30-inch rows, use a maximum of 0.6 fl oz per 1000 row feet.

For 22-inch rows, use a maximum of 0.5 fl oz per 1000 row feet.

For 20-inch rows, use a maximum of 0.4 fl oz per 1000 row feet.

For 15-inch rows, use a maximum of 0.3 fl oz per 1000 row feet.

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|-----------|---|---|--|--|---|
| Sugarcane | Brown Rust <i>Puccinia melanocephala</i> Orange Rust <i>Puccinia kuehnii</i> | 9 to 12 | 2 | 48 (0.78 lb ai/acre) | 14 |

Applications Directions. For optimal disease control, begin applications of Willowood Pyrac 2SC prior to disease development and continue on a 14- to 28-day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, do not apply more than 48 fl ozs of Willowood Pyrac 2SC per acre per season. Do not make more than two (2) sequential applications of Willowood Pyrac 2SC before alternating to a labeled non-Group 11 fungicide with a different mode of action.

** Not for use in California*

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|----------------|---|--|--|---|
|------|----------------|---|--|--|---|

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---|--|--|--|---|---|
| Tuberous and Corm Vegetables Subgroup Arracacha Arrowroot Chinese artichoke Jerusalem artichoke Cassava (bitter and sweet) Chayote (root) Chufa Dasheen Edible canna Ginger Leren Sweet Potato Tanier True yam Turmeric Yam bean | Downy mildew <i>Plasmopara</i> spp. | 6 to 12 | 1 | 72 <i>(1.18 lbs ai/acre)</i> | 3 |
| | Leaf spot <i>Cercospora</i> spp., <i>Alternaria</i> spp. | | | | |
| | Powdery mildew <i>Erysiphae</i> spp., <i>Leveillula taurica</i> | | | | |
| | Rust <i>Uromyces</i> spp. <i>Puccinia</i> spp. | | | | |
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| Potato | Black dot <i>Colletotrichum coccodes</i> | 6 to 9 | | | |
| | Early blight <i>Alternaria solani</i> | | | | |
| | Late blight <i>Phytophthora infestans</i> | 6 to 12 | | | |
| | Powdery mildew <i>Erysiphe</i> spp., <i>Leveillula taurica</i> | | | | |
| | <u>Suppression Only:</u> White mold <i>Sclerotinia sclerotiorum</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications at 7- to 14-day intervals prior to disease development. The low rate and longer interval can be used early season prior to the observance of symptoms and when disease pressure is low. **For control of late blight**, follow Willowood Pyrac 2SC application with a labeled fungicide with a different mode of action 5 to 7 days later.

Use the higher rates and shorter intervals once disease has been confirmed in your area or if weather conditions are favorable for disease development.

No livestock feeding restrictions.

Resistance Management. To limit development of resistance, do not apply more than 1.18 lbs ai pyraclostrobin (72 fl ozs of Willowood Pyrac 2SC) per acre per season.

Do not make more than one (1) Willowood Pyrac 2SC application before alternating to a labeled non-Group 11 fungicide with a different mode of action.

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|--|----------------|---|--|--|---|
| *The maximum product rate per season includes the combination of in-furrow and foliar uses. (For above-listed crops, in-furrow use is permitted in potato only.) | | | | | |

In-furrow Use to Aid in the Control of Soilborne Rhizoctonia in Potatoes

Use 0.4 to 0.8 fl oz of Willowood Pyrac 2SC per 1000 row feet. For applications on 32-inch or 34-inch rows, the maximum application rate is 0.73 fl oz/1000 row feet. Apply at planting as an in-furrow spray by directing spray pattern to uniformly cover seed pieces and surrounding soil. The spray pattern must be a 4- to 8-inch band applied to the seed piece prior to being covered with soil.

When Rhizoctonia disease pressure conditions are expected to be severe or if the field has a history of Rhizoctonia infestations, use Willowood Pyrac 2SC at 0.6 to 0.8 fl oz per 1000 row feet and/or tank mix with a fungicide having a different mode of action.

Do not apply more than 12 fl ozs per acre of Willowood Pyrac 2SC.

Use a minimum volume of application of 5 gallons of water per acre.

| Willowood Pyrac 2SC Rate per 1000 row feet (fl oz product) | Willowood Pyrac 2SC Rate (fl ozs/A) | | | | |
|--|-------------------------------------|---------------------------|--------------|--------------|--------------|
| | 32-inch rows | 34-inch rows | 36-inch rows | 38-inch rows | 40-inch rows |
| 0.4 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 |
| 0.6 | 10.0 | 9.6 | 9.0 | 8.6 | 8.1 |
| 0.8 | see footnote ¹ | see footnote ¹ | 12.0 | 11.4 | 10.8 |
| ¹ For 32-inch or 34-inch rows, use a maximum of 0.73 fl oz per 1000 row feet. | | | | | |

Table 2. Willowood Pyrac 2SC Crop-specific Requirements (cont'd)

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|---------------------|---|---|--|--|--|
| Wheat and Triticale | Black point Kernal smudge <i>Alternaria</i> spp., <i>Helminthosporium</i> spp. | 6 to 9* | 2 | 18 (0.29 lb ai/acre) | Apply no later than the beginning of flowering (Feekes 10.5, Zadok's 59) |
| | Leaf rust <i>Puccinia triticina</i> | | | | |
| | Powdery mildew <i>Erysiphe graminis</i> f. sp., <i>tritici</i> | | | | |
| | Septoria leaf and glume blotch <i>Septoria</i> spp., <i>Stagonospora</i> spp. | | | | |
| | Spot blotch <i>Cochliobolus sativus</i> | | | | |

| Crop | Target Disease | Product Rate per Application (fl ozs/A) | Maximum Number of Sequential Foliar Applications | Maximum Product Rate per Season (fl ozs/A) | Minimum Time from Application to Harvest (PHI) (days) |
|------|--|---|--|--|---|
| | Stem rust <i>Puccinia graminis f. sp., tritici</i> Stripe rust <i>Puccinia striiformis f. sp., tritici</i> Tan spot Yellow leaf spot <i>Pyrenophora spp.</i> | | | | |

Applications Directions. Begin Willowood Pyrac 2SC applications prior to disease development. To maximize yields in cereals, protect the flag leaf. Apply Willowood Pyrac 2SC immediately after flag-leaf emergence for optimum results.

Willowood Pyrac 2SC does not control Fusarium head blight (head scab) or prevent the reductions in grain quality that can result from this disease. When head blight is a concern, manage this disease with fungicides that are labeled for and effective in managing this disease, and with cultural practices like crop rotation and plowing to reduce crop residues that serve as an inoculum source.

Do not harvest wheat hay or feed green-chopped wheat within 14 days after last application.

Resistance Management. To limit development of resistance, do not apply more than 0.29 lb ai pyraclostrobin (18 fl ozs Willowood Pyrac 2SC) per acre per season.

Do not make more than two (2) sequential Willowood Pyrac 2SC applications before alternating to a labeled non-Group 11 fungicide with a different mode of action.

*For early season control of tan spot, Septoria leaf and glume blotch, and spot blotch when conditions favor disease development, apply 3 to 6 fl ozs per acre of Willowood Pyrac 2SC either in combination with a herbicide application or when conditions favor disease development. When the 3 to 6 fl ozs early season application rate is used, a second application of Willowood Pyrac 2SC may be required to protect the emerged flag leaf. Environmental conditions for disease or current disease pressure at the time of flag-leaf emergence should be used to determine the Willowood Pyrac 2SC rate for the second application. For high disease pressure, use the higher rate of Willowood Pyrac 2SC. Early season control is not registered for use in California.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

PESTICIDE DISPOSAL: Wastes resulting from use of this product may be disposed of on-site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[Nonrefillable Container (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

Steps to be taken in case material is released or spilled:

- In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.
- Dike and contain the spill with inert materials (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Willowood, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Willowood, LLC and Seller harmless for any claims relating to such factors.

Willowood, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Willowood, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

To the extent consistent with applicable law, neither Willowood, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF WILLOWOOD, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF WILLOWOOD, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Willowood, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Willowood, LLC.

Cabrio, Headline, Poast and Pristine are registered trademarks of BASF.

Assure and Prims are registered trademarks of E.I. DuPont de Nemours and Company.

Select is a registered trademark of Arysta Life Science North America Corporation.

[EPA approval date]



United States
Environmental Protection Agency
 Washington, DC 20460
Formulator's Exemption Statement
 (40 CFR 152.85)

| | |
|--|---|
| Applicant's Name and Address Willowood, LLC 1600 NW Garden Valley Blvd., Suite 120 Roseburg, OR 97471 | EPA File Symbol/Registration Number 87290- |
| | Product Name Willowood Pyrac 2SC |
| | Date of Confidential Statement of Formula (EPA Form 8570-4) 02/23/2016 |

As an authorized representative of the applicant for registration of the product identified above, I certify that:

(1) This product contains the following active ingredient(s):

Pyraclostrobin

(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another person and meets the requirements of 40 CFR section 158.50(e)(2) or (3).

(3) Indicate by checking (A) or (B) below which paragraph applies:

☒ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

☐ (B) The Confidential Statement of Formula (CSF)(EPA Form 8570-4) referenced above and on file with the EPA is complete, current, an accurate and contains the information required on the current CSF.

(4) The following active ingredients in this product qualify for the formulator's exemption.

Source

| Active Ingredient | Product Name | Registration Number |
|---|---|---------------------|
| Pyraclostrobin | [REDACTED] | [REDACTED] |
| *Product ingredient source information may be entitled to confidential | | |
| Signature | Name and Title Michael Kellogg / Agent | Date 2/23/16 |

EPA Form 8570-27 (Rev. 06-2004)

Copy 1 - EPA
Copy 2 - Applicant copy



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401 M Street, S.W.
WASHINGTON, D.C. 20460

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Certification with Respect to Citation of Data

| | |
|--|---|
| Applicant's/Registrant's Name, Address, and Telephone Number Willowood, LLC c/o Pyxis Regulatory Consulting, Inc.; 4110 136th St. NW Gig Harbor, WA 98332, (253) 853-7369 | EPA Registration Number/File Symbol 87290- |
| Active Ingredient(s) and/or representative test compound(s) Pyraclostrobin | Date February 23, 2016 |
| General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) Terrestrial Food/Nonfood | Product Name Willowood Pyrac 2SC |

NOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

SECTION I: METHOD OF DATA SUPPORT (Check one method only)

☐ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

☒ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

SECTION II: GENERAL OFFER TO PAY

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☒ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

SECTION III: CERTIFICATION

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.


| | | |
|---------------|-----------------|---|
| Signature | Date 2/23/16 | Typed or Printed Name and Title Michael Kellogg; Agent |
|---------------|-----------------|---|

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DATA MATRIX

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| Date February 23, 2016 | | | EPA Reg No./File Symbol 87290-xx | | Page 1 of 3 |
| Applicant's/Registrant's Name & Address Willowood, LLC 1600 NW Garden Valley Blvd., Suite 120 Roseburg, OR 97471 | | | Product Willowood Pyrac 2SC | | |
| Ingredient Pyraclostrobin | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
| Product Specific Data Requirements | | | | | |
| 830.1550 | Product Identity and Composition | 49846401 | Willowood, LLC | OWN | |
| 830.1600 | Description of Materials Used to Produce the Product | 49846401 | Willowood, LLC | OWN | |
| 830.1620 | Description of Production Process | | | | Not required ¹ |
| 830.1650 | Description of Formulation Process | 49846401 | Willowood, LLC | OWN | |
| 830.1670 | Discussion of Formation of Impurities | 49846401 | Willowood, LLC | OWN | |
| 830.1700 | Preliminary Analysis | | | | Not required ² |
| 830.1750 | Certified Limits | 49846401 | Willowood, LLC | OWN | |
| 830.1800 | Enforcement Analytical Method | 49846401 | Willowood, LLC | OWN | |
| 830.6302 | Color | 49846402 | Willowood, LLC | OWN | |
| 830.6303 | Physical State | 49846402 | Willowood, LLC | OWN | |
| 830.6304 | Odor | 49846402 | Willowood, LLC | OWN | |
| 830.6313 | Stability to Normal and Elevated Temperatures, Metals, and Metal Ions | | | | Not required ³ |
| 830.6314 | Oxidation/Reduction: Chemical Incompatibility | 49846402 | Willowood, LLC | OWN | |
| 830.6315 | Flammability | 49846404 | Willowood, LLC | OWN | |
| 830.6316 | Explosibility | | | | Not required ⁴ |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |


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| Ingredient Pyraclostrobin | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
| 830.6317 | Storage Stability | 49846403 | Willowood, LLC | OWN | |
| 830.6319 | Miscibility | | | | Not required ⁵ |
| 830.6320 | Corrosion Characteristics | 49846403 | Willowood, LLC | OWN | |
| 830.6321 | Dielectric Breakdown Voltage | | | | Not required ⁶ |
| 830.7000 | pH | 49846402 | Willowood, LLC | OWN | |
| 830.7050 | UV/Visible Absorption | | | | Not required ³ |
| 830.7100 | Viscosity | 49846402 | Willowood, LLC | OWN | |
| 830.7200 | Melting Point/Melting Range | | | | Not required ³ |
| 830.7220 | Boiling Point/Boiling Range | | | | Not required ³ |
| 830.7300 | Density/Relative Density/Bulk Density | 49846402 | Willowood, LLC | OWN | |
| 830.7370 | Dissociation Constants in Water | | | | Not required ³ |
| 830.7520 | Particle size, fiber length, diameter distribution | | | | Not required ⁷ |
| 830.7550 | Partition Coefficient (n-octanol/water), Shake Flask Method | | | | Not required ³ |
| 830.7560 | Partition Coefficient (n-octanol/water), Generator Column Method | | | | Not required ³ |
| 830.7570 | Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography | | | | Not required ³ |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |

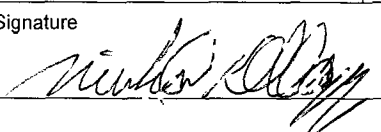
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| Applicant's/Registrant's Name & Address Willowood, LLC 1600 NW Garden Valley Blvd., Suite 120 Roseburg, OR 97471 | | | Product Willowood Pyrac 2SC | | |
| Ingredient Pyraclostrobin | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
| 830.7840 | Water Solubility: Column Elution Method; Shake Flask Method | | | | Not required ³ |
| 830.7860 | Water Solubility, Generator Column Method | | | | Not required ³ |
| 830.7950 | Vapor Pressure | | | | Not required ³ |
| 870.1100 | Acute Oral Toxicity: Rat | 47523706 | BASF Corporation | PAY | |
| 870.1200 | Acute Dermal Toxicity: Rat | 47523707 | BASF Corporation | PAY | |
| 870.1300 | Acute Inhalation Toxicity: Rat | 47523708 | BASF Corporation | PAY | |
| 870.2400 | Primary Eye Irritation: Rabbit | 47523709 | BASF Corporation | PAY | |
| 870.2500 | Primary Dermal Irritation | 47523710 | BASF Corporation | PAY | |
| 870.2600 | Dermal Sensitization | 47523711 | BASF Corporation | PAY | |
| Pyraclostrobin Generic Data Requirements | | | | | |
| Willowood Pyrac 2SC qualifies for Formulator's Exemption for pyraclostrobin generic data requirements. | | | | | |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |

Endnotes for Data Matrix for Willowood Pyrac 2SC

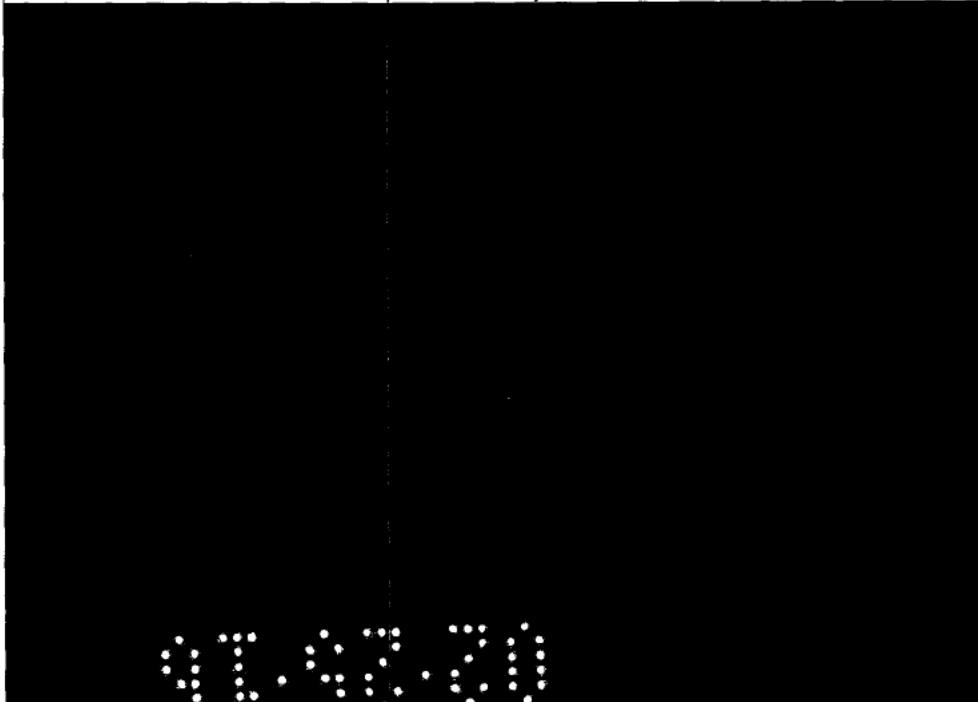

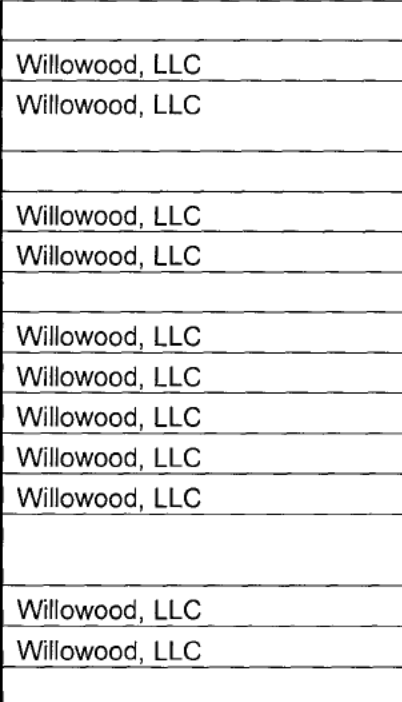

- ¹ **830.1620** - Per OPPTS 830.1000, these data are not required for the registration of an end-use product. See 830.1650 for formulation process information.
- ² **830.1700** – This product does not consist solely of the technical grade active ingredient (TGAi) and is not produced by an integrated system, therefore, per OPPTS 830.1700, these data are not required.
- ³ **830.6313, 830.7050, 830.7200, 830.7220, 830.7370, 830.7550, 830.7560, 830.7570, 830.7840, 830.7860 and 830.7950** – Per OPPTS 830.1000, these data are not required for the registration of an end-use product.
- ⁴ **830.6316** – This product does not have explosive characteristics; therefore these data are not required. Please refer to the Confidential Statement of Formula for additional information on the composition of Willowood Pyrac 2SC.
- ⁵ **830.6319** – Willowood Pyrac 2SC is water-based and not an emulsifiable concentrate. In addition, the proposed labeling recommends dilution with water, not oil; therefore, these data are not required.
- ⁶ **830.6321** – This product is not proposed for use around electrical equipment. Therefore, these data are not applicable nor are these data required.
- ⁷ **830.7520** - These data are not required for Willowood Pyrac 2SC because it is not water insoluble and is not a fibrous material.

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| Ingredient Pyraclostrobin | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
|  |  |  | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ¹ |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ² |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ³ |
| | | | Willowood, LLC | OWN | |
| | | | Willowood, LLC | OWN | |
| | | Not required ⁴ | | | |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |

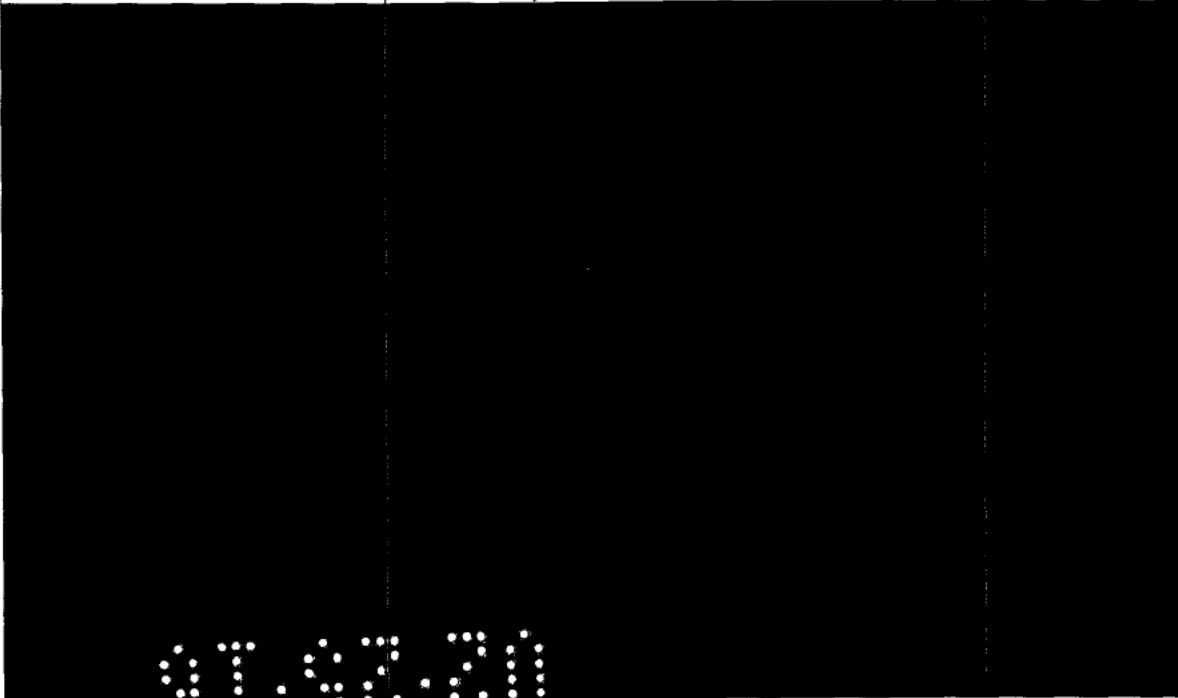
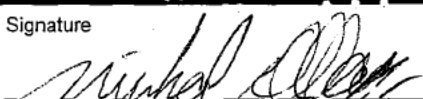
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|---|----------------------|---------------------------|---|--------|---------------------------|
| Date February 23, 2016 | | | EPA Reg No./File Symbol 87290-xx | | Page 2 of 3 |
| Applicant's/Registrant's Name & Address Willowood, LLC 1600 NW Garden Valley Blvd., Suite 120 Roseburg, OR 97471 | | | Product Willowood Pyrac 2SC | | |
| Ingredient Pyraclostrobin | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
|  | | | Willowood, LLC | OWN | |
| | | | | | Not required ⁵ |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ⁶ |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ³ |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ³ |
| | | | | | Not required ³ |
| | | | Willowood, LLC | OWN | |
| | | | | | Not required ³ |
| | | | | | Not required ⁷ |
| | | Not required ³ | | | |
| | | Not required ³ | | | |
| | | Not required ³ | | | |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.

WASHINGTON, D.C. 20460

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DATA MATRIX

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|---|----------------------|-------------|---|-------------|---------------------------|
| Date February 23, 2016 | | | EPA Reg No./File Symbol 87290-XX | Page 3 of 3 | |
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| | | | | | Not required ³ |
| | | | | | Not required ³ |
| | | | | | Not required ³ |
| | | | | | |
| | | | BASF Corporation | PAY | |
| | | | BASF Corporation | PAY | |
| | | | BASF Corporation | PAY | |
| | | | BASF Corporation | PAY | |
| | | | BASF Corporation | PAY | |
| | | | BASF Corporation | PAY | |
| Signature  | | | Name and Title Michael Kellogg, Consultant | | Date 2/23/16 |

Endnotes for Data Matrix for Willowood Pyrac 2SC

[REDACTED]

[REDACTED]

Pages 124-127 - *Confidential Statements of Formula may be entitled to confidential treatment*